

## First Five-Year Review Report

for

Wash King Laundry Site

Pleasant Plains Township, Lake County, Michigan

September, 2006

Prepared By:

Michigan Department of Environmental Quality Lansing, Michigan

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# First Five-Year Review Report

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#### **List of Acronyms**

ACRONYM NAME OR TERM

bgs Below Ground Surface
CBAS Coarse Bubble Air Stripping
CFR Code of Federal Regulations

CQAP Construction Quality Assurance Plan

DCE 1,2-dichloroethylene

ESD Explanation of Significant Difference

EW Extraction Well

GAC Granulated Activated Carbon
GMN Groundwater Monitoring Network

gpm Gallons per Minute
IC Institutional Controls

LTMNO Long-Term Monitoring Network Optimization
MCL Maximum Contaminant Level (drinking water)
MDEQ Michigan Department of Environmental Quality

MW Monitor Well

NPL National Priorities List

NREPA Natural Resources and Environmental Protection Act

O&M Operation and Maintenance

OU Operable Unit

PCE Perchloroethene or Tetrachloroethylene

PCOR Preliminary Closeout Report Parts per Billion concentration

RA Remedial Action

RAO Remedial Action Objectives

ROD Record of Decision

RD/RA Remedial Design/Remedial Action
RI/FS Remedial Investigation/Feasibility Study

SARA Superfund Amendments and Reauthorization Act of 1986

SV Soil Vapor

SVE Soil Vapor Extraction TCE Trichloroethene

U.S. EPA United States Environmental Protection Agency

VOC Volatile Organic Compound

WKL Wash King Laundry

#### **Executive Summary**

The purpose of a statutory five-year review is to evaluate whether a completed remedial action remains protective of human health and the environment where hazardous waste remains on-site at levels that do not allow for unlimited use and unrestricted exposure. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and identify recommendations to address them.

The Michigan Department of Environmental Quality conducted this policy five-year review.

Based on the results of the five-year review, the remedy was constructed in accordance with the Record of Decision (ROD) and Explanation of Significant Difference (ESD).

In order for the remedy to continue to be considered protective of human health and the environment, institutional controls (ICs, e.g., groundwater protection zones, well-drilling restrictions) are needed to prevent exposure to contaminants until soil and groundwater cleanup standards are achieved. Recommendations and follow-up actions identified within this report also need to be completed to further define the extent of impact. Long-term protectiveness will be achieved once the pump and treat system reaches cleanup levels (e.g., Maximum Contaminant Levels [MCL], State standards, etc.) in the groundwater.

This review will be placed in the Site files and the local repository for the Wash King Laundry (WKL) Superfund Site at the following locations and be available for viewing during normal business hours:

Pathfinder Community Library 812 Michigan Avenue Baldwin, Michigan 49304

U.S. Environmental Protection Agency Region 5 Records Center, 7<sup>th</sup> Floor 77 West Jackson Boulevard Chicago, Illinois 60604

Michigan Department of Environmental Quality Remediation and Redevelopment Division, Superfund Section 525 West Allegan Street P.O. Box 30426 Lansing, Michigan 48909-7926

## Five-Year Review Summary Form

SITE IDENTIFICATION			
Site name (from WasteLAN): Wash King Laundry Site			
EPA ID (from Was	steLAN): MID9	980701247	
Region: 5	State: MI	City/County: Baldwin, Pleasant Plains Township, Lake County	
		SITE STATUS	
NPL status: ■ Fi	nal 🗆 Deleted 🗆 C	Other (specify)	
Remediation sta Complete	tus (choose all that	t apply): ☐ Under Construction ■ Operating ☐	
Multiple OUs?	JYES ■ NO	Construction completion date: 03/30/2001	
Has site been pu	ıt into reuse? □	YES ■ NO	
	j	REVIEW STATUS	
		Tribe	
Author name: Ke	eith M. Krawczyk		
Author title: State Project Manager		<b>Author affiliation:</b> Michigan Department of Environmental Quality, Remediation and Redevelopment Division, Superfund Section	
Review period:	June 1, 2006 to S	eptember 30, 2006	
Date(s) of site inspection: June 30, 2006			
Type of review:  ■ Post-SARA □ Pre-SARA □ NPL-Removal only □ Non-NPL Remedial Action Site □ NPL State/Tribe-lead x□ Regional Discretion			
Review number: ■1 (first) □ 2 (second) □ 3 (third) □ Other (specify)			
Triggering action:  ☐ Actual RA Onsite Construction at OU # 1 ☐ Actual RA Start at OU#  ■ Construction Completion ☐ Previous Five-Year Review Report  ☐ Other (specify)			
Triggering action date (from WasteLAN): March 30, 2001			
Due date (five years after triggering action date): March 30, 2006.			

#### Issues:

- 1. The extent of contamination in the aquifer is not fully characterized nor is it monitored adequately across the Site.
- 2. It is not clear what the capture zone is of the groundwater extraction system; groundwater quality analytical results from monitor wells located down-gradient of the extraction wells show elevated levels of volatile organic compounds.
- 3. Results from sampling and monitoring near the former WKL building indicate that there may be a significant amount of additional source material present in that general area of the Site, where there is currently only a minimal amount of groundwater extracted from the formation (< 5 gallons per minute).
- 4. Inorganic contaminants are present in groundwater above criteria.
- 5. There are no ICs prohibiting use of site soils or groundwater.
- 6. Frequent power outages have occurred causing system shutdown.

## **Recommendations and Follow-up Actions:**

- 1. Additional monitoring points within the aquifer are needed to evaluate long-term protectiveness and potential risks to down-gradient receptors, as well as to better understand the fate and transport of contamination.
- A capture zone evaluation should be conducted to ensure the groundwater treatment system is not and will not allow down-gradient migration of impacted groundwater.
- 3. The extent of the additional source area near the WKL building should be defined and, if appropriate, options to enhance or supplement the current treatment system should be evaluated.
- 4. An annual evaluation of inorganic compounds present in groundwater should be conducted to confirm they do not pose an unacceptable risk.
- 5. An IC study should be conducted to determine if ICs are appropriate.
- 6. A three-phase power surge protector should be installed and all operating components inspected to ensure they have not been adversely impacted by power outages or are beyond expected equipment service life.

#### **Protectiveness Statement:**

The remedy was constructed in accordance with the ROD and ESD.

In order for the remedy to continue to be considered protective of human health and the environment, ICs (e.g., groundwater protection zones, well-drilling restrictions) are needed to prevent exposure to contaminants until soil and groundwater cleanup standards are achieved. Recommendations and follow-up actions identified within this report also need to be completed to further define the extent of impact. Long-term protectiveness will be achieved once the pump and treat system reaches cleanup levels (e.g., MCLs, State standards) in the groundwater.

#### **Five-Year Review Report**

#### I. Introduction

#### The Purpose of the Review

The purpose of this policy five-year review is to evaluate whether the on-going remedial action (RA) remains protective of human health and the environment at sites where hazardous waste remains on-site at levels that do not allow for unlimited use and unrestricted exposure while the site RA is operating. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and identify recommendations to address them.

#### Authority for Conducting the Five-Year Review

The agencies have prepared this five-year review as a policy decision. The Comprehensive Environmental Response, Compensation, and Liability Act, Section §121(c) states:

"If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section 104 or 106, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews."

The agencies interpreted this requirement further in the National Contingency Plan; 40 Code of Federal Regulations (CFR) Section 300.430(f)(4)(ii) which states:

"If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for the unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action."

This is a policy five-year review. At the conclusion of this remedy there should be no hazardous substances, pollutants, or contaminants remaining at the Site above levels that allow for unlimited use and unrestricted exposure. However, since this remedy has taken more than five years to complete, a policy five-year review is being conducted at this juncture.

#### Who Conducted the Five-Year Review

Mr. Keith M. Krawczyk, State Project Manager, Michigan Department of Environmental Quality (MDEQ), in consultation with Mr. Russell Hart, Remedial Project Manager, U.S. Environmental Protection Agency (U.S. EPA) Region 5, performed this five-year review. The five-year review was based, in part, on the ongoing operation and maintenance (O&M) activities at the Site from April 2001 to the present, and the interpretation of historic analytical data and data collected during the O&M. In addition, the Project Manager reviewed various Site-related documents including the Record of Decision (ROD), Statement of Work, Explanation of Significant Difference (ESD), Preliminary Closeout Report (PCOR), and results of a Long-Term Optimization Study completed for this Site. The MDEQ completed this five-year review based upon the information obtained from these sources and activities.

#### Other Review Characteristics

This is the first five-year review for the Wash King Laundry (WKL) Site. The triggering action for this policy review is the March 30, 2001, date of construction completion; however, as a result of a delay in procuring funding to conduct the review, the due date was pushed back six months to September 30, 2006.

## II. Site Chronology

**Table 1: Chronology of Site Events** 

Event	Date
First reports of volatile organic compound (VOC) contamination in wells	1973
Noncompliance Finding and Order to Comply	1976
Investigative action and residential well sampling	1978-1982
State settlement with owner resulting in installation of alternate public water supply	1982-1984
National Priorities List (NPL) inclusion proposal	December 1982
NPL finalization	September 1983

**Table 1: Chronology of Site Events (cont.)** 

Remedial Investigation/Feasibility Study (RI/FS) Negotiations	Notice letters sent December 1986; negotiations concluded without settlement September 1987
RI/FS field investigation	Field work begun September 1988
Proposed Plan	Issued to public to begin comment period September 1992
ROD	Signed March 31, 1993
ESD	Signed July 1, 1996
Remedial Design (RD)	Pre-design begun September 1993; after ESD; Groundwater design developed September 1996 and Soil Vapor Extraction (SVE) plans April 1998
RA Construction	Cooperative Agreement developed September 1998; initial mobilization June 1999. Second phase contract award August 2000.
PCOR	Signed March 30, 2001
Notice of Five-Year Review Report Prep.	June 15, 2006, in the Lake County Star Newspaper and June 19, 2006, in the Freeway Shopper's Guide
Site Inspection	June 30, 2006
Five-Year Review Report	September 30, 2006

## III. Background

## **Physical Characteristics**

The WKL is located south of the city of Baldwin in Pleasant Plains Township, Lake County, Michigan, in the Pere Marquette River Basin. A series of end moraines and

ground moraines were deposited in this region by the Lake Michigan Lobe of the Wisconsin glaciation. Most of the boundaries of the basin are comprised of end moraines. Glacial outwash between moraines covers more than half of the drainage basin. The outwash plains are relatively level, but are dissected in places by streams and pitted with kettle holes formed by melting blocks of glacial ice. The Middle Branch of the Pere Marquette River, which forms the northern boundary of the Site, is one of these dissecting streams.

Glacial deposits in this region range from approximately 400 to 600 feet thick. The bedrock underlying the glacial deposits is the Mississippian Age Michigan Formation, which is not utilized as an aquifer in this region.

Site soils are generally composed of fine- to medium-grained sands to a depth of approximately 75 to 100 feet below ground surface (bgs), with some interbedded clay, sand and clay, and gravel lenses, ranging in thickness from one to several feet. These deposits are underlain by a thicker clay layer that subdivides the shallow sandy aquifer from a deeper, predominantly sandy aquifer that extends to a depth of approximately 350 feet bgs.

The current boundaries of the Site are shown on the attached Figure, titled "Wash King Laundry Superfund Site," and are generally defined by the Middle Branch of the Pere Marquette River to the north, Star Lake Road (76<sup>th</sup> Street) to the south, by the C&O Railroad to the west, and by a line approximately 300 feet east of highway M-37 on the east. The Site is relatively flat except for a steep embankment leading down to the Middle Branch of the Pere Marquette River.

#### Land and Resource Use

Site operations ceased in 1991 when the Site owner declared bankruptcy. The State of Michigan entered into a lease agreement and easement agreement granting property access to the State and the U.S. EPA for the purpose of performing needed site remediation, such as design, construction, and operation.

There are approximately 123 residential lots within the Pere Marquette Subdivision Plat which comprises the Site. Earlier in the Site's history, most of these lots were not used on a year-round basis. More recent development near the Site has included commercial enterprises and more permanently used residences. The former WKL building has been dismantled. Flow in the nearby Middle Branch of the Pere Marquette River is generally west, to Lake Michigan. The river and its tributaries are classified by the State of Michigan as "top-quality main streams" and "trout streams," respectively. The area is a popular destination for canoeists, kayakers, and anglers.

#### History of Contamination

The WKL was a small, privately-owned laundromat in operation between 1962 and 1991. Beginning in 1962, the WKL discharged laundry wastes (detergent and bleach) to four nearby seepage lagoons located about 500 feet west of the laundry facility. As part of the laundry operations/services, dry cleaning was conducted, which included the use of the solvent Perchloroethene or Tetrachloroethylene (PCE). Consequently, PCE was also discharged to the unlined wastewater lagoons until late 1978.

In 1973, detergent contamination (detergent and bleach) was detected in residential wells located in the vicinity of the lagoons. In 1976, further contamination (PCE) of groundwater was discovered, and the State of Michigan issued a Notice of Noncompliance and Order to Comply to the WKL owner. In 1977, concentrations of PCE up to 6,000 parts per billion (ppb) were recorded in the WKL well, and up to 20,000 ppb in an adjacent restaurant well, located directly down-gradient of the former WKL building. In 1978, the WKL agreed to cease all dry cleaning operations.

In 1979, a preliminary hydrogeologic investigation was initiated to obtain information related to groundwater contamination and flow, and soil types at the Site. Monitoring wells were installed and sampled along with sampling of residential wells. Results indicated significant PCE contamination in groundwater within the area down-gradient of the former WKL building and unlined wastewater lagoons. Subsequent investigations and analysis indicate that a groundwater contaminant plume(s) is migrating toward the Middle Branch of the Pere Marquette River. Approximately 30 private domestic wells have been contaminated with PCE, and an alternate water supply was offered to affected residents.

While high levels of organic contaminants were generally not present in soil samples collected from the lagoons, high levels of PCE contamination in soil were detected near the WKL building. Breakdown products of PCE, such as Trichloroethene (TCE) and cis-1,2-Dichloroethylene (cis-1,2-DCE) have also been detected.

#### Initial Response

In 1983, the State of Michigan negotiated a settlement with the Site owner/operator requiring the construction of a public water supply system to serve residences and businesses in the area of contamination. Two wells (main and standby) were installed into a deeper, uncontaminated zone of the aquifer, at a depth of approximately 259 feet and 240 feet below grade, respectively. These wells pump from a deeper portion of the aquifer that is separated from the shallower, contaminated zone by a clay layer that is present, generally, around 80 to 90 feet bgs. These wells supply water to most nearby residences. Citizens were offered the opportunity to connect to this water supply in 1984. Those they did not connect are now participating in a residential well sampling program. The residential wells are sampled on an annual basis.

Monitoring wells (MW) were installed and used to begin tracking movement of the groundwater contaminant plume.

#### **Basis for Taking Action**

After an appropriate public comment period and notification in the Federal Register, the WKL Site was officially put on the NPL on September 8, 1983. On December 31, 1986, the U.S. EPA sent a Special Notice Letter to the Site owner/operator offering opportunity to undertake an RI/FS of the Site. Discussions concerning private conduct of the RI/FS were not productive. The U.S. EPA and the MDEQ developed a cooperative agreement such that the MDEQ would then have the lead in RI/FS development.

#### IV. Remedial Investigation

The RI/FS work began in September 1988 with an emphasis on data collection and site characterization. A total of eleven MWs were installed; five wells were screened in the "shallow" portion of the surficial aquifer, whereas the remaining six wells were installed deeper in the surficial aquifer. Soil samples were collected during MW borehole advancement and groundwater samples were subsequently collected from the MWs. Five sediment samples were collected, with three of these sediment samples being collected from the Middle Branch of the Pere Marquette River, whereas the other two were collected from the Wash King lagoons. In addition, three surface water samples were collected from the river and the other two were collected from standing water in the lagoons.

Results of the soil and groundwater analyses substantiated and further defined the nature and extent of impact. The investigation established that the primary contamination consists of VOCs, primarily PCE, and to a lesser extent TCE and heavy metals. Based on the monitoring that was conducted, it was determined that a groundwater plume(s) extends from the lagoons and the laundry facility generally to the north-northeast, toward the Middle Branch of the Pere Marquette River. Plume migration is governed primarily by groundwater flow, but may also be moving via density gradients (different soil types). PCE was identified in both sediment and surface water from the lagoons; however, it was not recorded in the samples collected from the river. The RI report dated March 15, 1991, provides a more detailed summary of RI sample results.

The RI reports indicated that the relatively low PCE concentrations in the subsurface soils and high PCE concentrations in groundwater indicate there is little attenuation by soils of the organic contaminants. That is consistent with the composition of natural soils at the Site, being low in total surface area, organic matter, and clay. It was not determined, based on the data collected, if the contaminant plume was flowing underneath the Middle Branch of the Pere Marquette River.

In 1994, eight additional MWs were installed, 71 soil borings were completed, and a seismic reflection survey was conducted. These activities were completed to: further evaluate the nature and extent of groundwater contamination and to determine if contamination is flowing under the river; to evaluate if there is an additional source of soil and groundwater impact at the WKL building area; and, to determine if the deep clay layer is competent across the Site, possibly retarding or precluding groundwater contamination from entering the deeper aguifer.

Results of the additional investigation indicated both the lagoons and the WKL building area are sources of contamination, with the highest contaminant concentrations being present near the WKL building. In addition, there is evidence that contaminant migration may be influenced by permeable soil horizons or cohesive units that were not identified during the field investigation. The extent of impacted soil near the building was more widespread than initially thought and was not fully defined during this phase of the investigation.

The RI/FS established that the primary contaminants associated with the Site are the carcinogenic volatile organics PCE and TCE. The Safe Drinking Water Act, 1976 PA 399, as amended, and Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), have established a maximum contaminant level of 5 ppb for PCE and TCE, and 70 ppb for cis-1,2-DCE. Groundwater sampling found PCE at levels of 270 ppb near the former lagoon discharge area, and 7,900 ppb near the former WKL building. The RI/FS reports were finalized in 1991.

#### Summary of Site Risks

As part of the RI/FS, a risk assessment was conducted to determine if site contamination could affect human health and the environment. The evaluation compared contaminant levels at the Site with State and Federal standards, considered the manner in which people could be exposed to site-related contaminants, and estimated whether the contaminants could pose a threat to human health and the environment. For the WKL, the potential exposure pathways were evaluated based on current land use and on assumptions of plausible land use changes which may allow additional types of exposures (i.e., future land use conditions). At the time of the ROD, pathways considered to be most significant at the Site are summarized as follows:

- Exposure of children to contaminated lagoon sediment through incidental ingestion and dermal absorption while playing in the lagoons.
- Exposure of residents to contaminated groundwater resulting from use of a well
  within the contaminated groundwater plume or by migration of groundwater
  contaminants to existing wells. Exposure may occur through ingestion or dermal
  contact with contaminated water. It would also be possible for exposure to occur
  through inhalation during household water usage.

- Exposure of individuals to contaminated soils at a future residence(s) developed at the site (e.g., on top of the lagoons). Exposure may occur through incidental ingestion of soil and dermal contact. It is assumed that contaminants in either lagoon sediments or subsurface soils at current concentrations would be available for exposure as a result of site development.
- Exposure of recreational users of the Middle Branch of the Pere Marquette River to contaminated surface water. Exposures may occur through incidental ingestion and dermal contact with surface water while swimming. (Even though this exposure route is more unlikely than the ones noted above, it was still considered in the risk analysis.)

The risk analysis was conducted for site conditions prior to remediation and prior to the ESD being developed. Under the land use scenario at the time of the ROD, the Site appeared to present a public health concern for children exposed to lagoon sediment while at play in the lagoons. The non-carcinogenic health risk (HI=4) is primarily due to exposure to lead in the lagoon sediments and the carcinogenic health risk (8x10[-6]) is primarily due to exposure to arsenic in the lagoon sediments. Exposure of children to lagoon surface water would not produce unacceptable non-carcinogenic health effects, nor would it pose an unacceptable cancer risk, based on the risk calculations that were completed.

Unacceptable exposure from surface water, groundwater or subsurface soil should not occur. Site contaminants have not been above detection limits in river surface water, and exposure to groundwater and subsurface soil under current land use conditions is unlikely.

Under future land use scenarios considered at the time of ROD development, the Site appears to be a public health concern due to potential exposure to contaminated groundwater and lagoon sediment. Groundwater would pose a non-carcinogenic health risk (HI=8) primarily due to the potential ingestion of PCE and lead. The groundwater cancer risk (5x10[-3]) would be due primarily to the ingestion of PCE, 1,1,2,2tetrachloroethane, chrysene, and arsenic. As with the current site conditions, lagoon sediment would pose a non-carcinogenic health risk (HI=10) because of the potential ingestion of lead. The sediment cancer risk (2x10[-4]) would be due primarily to arsenic concentrations in the sediments. Based on the assumptions applied, exposure of onsite residents to subsurface soils and exposure of recreational users to river surface water would produce no unacceptable non-carcinogenic health effects, nor would it pose an unacceptable cancer risk. At the present time, in the interest of maintaining protectiveness of human health and the environment, the agencies will evaluate groundwater data from critical areas around the Site, such as down-gradient of extraction wells (EW) and near boundaries between residents served by the alternate clean water supply and private wells.

The Middle Branch of the Pere Marquette River sediments and surface water will not be addressed in the remedy since detected contamination has not resulted in any identified risks in excess of 1x10[-6].

#### V. Remedial Actions

#### Remedy Selection

In August 1992, a Proposed Plan presenting the remedial alternatives being considered was released to the public for public comment. After evaluation of comments received, the MDEQ prepared a Record of Decision (ROD) for the WKL and the U.S. EPA signed the ROD on March 31, 1993. The primary remediation components included the installation of a groundwater extraction and treatment system to capture contaminated groundwater from the shallower aquifer zone (i.e., above the clay layer which occurs at a depth of approximately 90 feet) to attempt aquifer restoration. Extracted water would be treated and subsequently discharged to the Pere Marquette River. The remedy also called for excavation and off-site disposal of approximately 1500 cubic yards of contaminated lagoon sediments and excavation of contaminated soils with off-site disposal. Michigan's Type A and Type B cleanup criteria were the remedial action objectives (RAO's).

#### July 1996 Explanation of Significant Difference and Cleanup Standards

After ROD completion, the U.S. EPA and the MDEQ extended cooperative agreement arrangements to cover needed pre-design and RD activity. As part of RD, additional investigation of the lagoons, the soils under and adjacent to the WKL building, and of the groundwater was conducted. As a result of the additional investigation, significant changes in the conduct of the remedy were warranted based on the data that was collected. The most profound change was that with the cessation of Site operations when the owner/operator declared bankruptcy, what had been "lagoon sediments" were transformed into surface soils as the former lagoons dried up. At the time of the ESD, the Type A and Type B cleanup criteria were no longer supported by the current State regulations, and therefore, the ESD prescribed use of the Part 201 residential cleanup criteria as RAO's.

The ESD explains risks and justifies in detail the changes to conduct of the remedy for the Site. The following table compares the remedy described in the ROD to the remedy as a result of the ESD.

Table 2

Record of Decision	ESD Remedy Conduct Change
Use of Michigan Type A and Type B	Use of cleanup criteria generated under
cleanup criteria for the lagoons and	Part 201, Environmental Remediation, of
groundwater, based on the Environmental	Act 451, of the NREPA. The 201 cleanup
Response Act, 1982 PA 307, as amended.	criteria that will be used for this Site are
	the generic residential cleanup criteria.
Excavation of lagoon sediments with off-	No remediation of the lagoons. Additional
site disposal.	data did not support the need for a
	remediation to protect human health or the environment.
Excavation of contaminated soils	Use of soil vapor extraction (SVE) for
discovered near the WKL building.	treatment of contaminated soils under and
	around the WKL building to achieve levels
(The ROD suggested that solvent storage	appropriate for unrestricted use of site
areas and Laundromat drains be checked	soils.
as additional possible source areas before	0.45
design implementation.)	SVE was considered appropriate
	technology to utilize in soils around the
Groundwater extraction with	Laundromat building.  Groundwater extraction with treatment for
	1
physical/chemical treatment for both inorganic and organic contaminants.	organic contaminants only. Further evaluation of inorganic contamination to
morganic and organic contaminants.	determine if treatment is warranted.
Discharge of the treated groundwater to	Relocation of the groundwater discharge
the Pere Marquette River.	to secondary lagoons.
Deed restrictions on properties where	No deed restrictions necessary at this time
there exists groundwater contamination	due to anticipated remediation of the
above cleanup criteria.	groundwater to the drinking water
	standards/residential cleanup criteria.
No provision in ROD	Drainage and removal of sump(s) within
	the WKL building, along with the building
	itself, if necessary.

#### **Groundwater Treatment System:**

In September 1996, the MDEQ submitted revised final versions of the groundwater extraction and treatment portion of the RD. On September 23, 1996, the U.S. EPA found that its comments which it had previously submitted to the MDEQ concerning design plan content had been appropriately addressed, and indicated its approval. Taking into account changes in the conduct of the remediation as discussed in the ESD, estimated remediation costs dropped to approximately half of those noted in the 1993 ROD.

Groundwater remediation plans called for installation of six EWs to provide capture of the plume of contaminated groundwater associated with the Site. Two of these wells were proposed near the WKL building (EW2) and discharge lagoons (EW1) once used to receive wastewaters/discarded solvents; whereas the remaining four extraction wells (EW3 through EW6) were proposed at down-gradient locations, to help arrest further spread of the plume. As will be noted later in this report, the subsurface soils present at the proposed location of EW3 were not conducive for capturing groundwater and, therefore, this extraction well was not installed.

The groundwater treatment system currently consists of five groundwater EWs and two air strippers to treat contaminated groundwater. Pumps in each EW extract and deliver water to the treatment system in the treatment building. The pump size in each well is based on the EW's anticipated yield. Extraction well EW2 contains an environmental pump because of the extremely high contaminant concentrations at and near that location. The other EWs have standard submersible pumps. Each EW is combined into a 6-inch line in the treatment building. The 6-inch line separates into two 3-inch lines. Each 3-inch line is equipped with flow control valves and a flow meter to measure total flow into the treatment system. The two 3-inch lines deliver contaminated water into a coarse bubble air-stripping (CBAS) unit. The two CBAS units are arranged in parallel to treat contaminated groundwater. After the groundwater is treated with the CBAS system, it collects in a wet well and is pumped into newly constructed discharge lagoons located near the western boundary of the Site. The air from the air strippers passes through two blowers and is treated by granulated activated carbon. The treated air is discharged into the atmosphere. There are sampling ports between each process unit of the groundwater treatment system so temperature and pressure can be measured and samples can be collected at any point in the treatment system.

A network of MWs will provide data needed to evaluate overall performance of the remediation system. Other associated design items include necessary grading, paving, piping network, valves, conduits and cables, heating/ventilation/air conditioning equipment as necessary for the treatment building and operators, lighting fixtures, etc. Figure 2 is a Site Map-Plan View that shows the location of the former WKL building, extraction and monitor well locations, as well as the former lagoons and current groundwater treatment discharge lagoons.

#### Soil Treatment System:

The SVE system consists of SVE wells at five locations, with two locations having two screens set at different depths in the vadose zone (soil above the groundwater table), for a total of seven SVE wells. Figure 3 is a schematic showing the SVE treatment system.

There are two 1,500-pound vapor phase granular activated carbon tanks in series located in the treatment building. A blower operates at about 400 cubic feet per minute

to yield positive soil vapor displacement; a silencer is used in conjunction with the blower so that remedial operations are not a noise nuisance to the community.

A butterfly valve and solenoid valve control each of the SVE wells. After the solenoid valves, there is a 4-inch header piper combining the extracted SVE flow from the SVE wells. Each SVE well has a sampling port at the wellhead so that temperature and pressure can be measured and air samples collected from each SVE well. The solenoid valves installed for the SVE wells have control relays, which send signals to the main control panel and operate the SVE wells in a desired sequence. A flow meter measures the flow of total extracted vapors.

The SVE vapors pass through an air/water separator tank to separate any water present in SVE vapors. Water separated by the air/water separator is combined with the untreated water in the groundwater treatment system. There is a fresh air bleed line prior to the SVE blower that combines atmospheric air with the extracted vapors and dilutes the incoming vapors.

There are sampling ports at different points of the SVE system to collect vapor samples and to take vacuum and temperature readings. The vacuum for the SVE system is created with a SVE blower prior to the granular activated carbon tanks. The SVE vapor extracted from the SVE wells is then treated with the activated carbon. Treated SVE vapor is released into the atmosphere.

In the spring of 1998, the MDEQ provided the U.S. EPA with a set of revised design plans concerning the SVE source control system. On April 14, 1998, the U.S. EPA indicated that its previous comments on these plans had been appropriately addressed, and indicated its approval.

#### Remedy Implementation

Following RD plan approval, the U.S. EPA and the MDEQ committed necessary RA funds. Consultants acting on behalf of the MDEQ solicited construction bids from interested parties, beginning in November 1998, and in December 1998 conducted an on-site inspection opportunity for interested potential construction firms. Bids received were evaluated during the winter months of 1999. On April 9, 1999, an award of contract for construction was made. On June 9, 1999, the MDEQ, the U.S. EPA, and the engineering contracting firm retained by the MDEQ participated in a preconstruction conference with the construction contractor to discuss projected activity. The construction contractor established a field presence at the WKL Site on June 14, 1999.

Construction progress consisted of these significant milestones:

 As work began, a boiler in the former WKL building was found to have asbestoswrapped coating as a fire protection aid. Materials were handled in accordance with an asbestos removal work plan developed especially for this purpose. Wet handling was used to remove asbestos materials, along with proper ventilation conditions, double-bagging and marking of asbestos materials, and appropriate off-site disposal.

- Interested citizens were kept informed of Site construction progress. In July 1999, the MDEQ developed an Information Bulletin which was mailed to all parties on the Site's mailing list. On August 12, 1999, the MDEQ, with U.S. EPA participation, conducted a public meeting at the Pleasant Plains Township Hall to discuss remedial activities to date, and upcoming work. The MDEQ also supplied subsequent updates of construction progress.
- By late August/early September 1999, work shifted to dismantlement of the former WKL building. The former owner was given opportunity to collect any items of value from the building before demolition began. In addition to eliminating an old facility which may have posed a safety hazard to area youngsters, design indicated that elimination of the building would assist in reducing length of piping runs, thereby deflecting a portion of the cost of demolition. Also, building dismantlement may aid future redevelopment of the Site by making the Site more attractive to a prospective new owner.

The great majority of materials derived from building demolition were put into dumpsters and hauled to a waste disposal site in Manistee, Michigan. However, there was some attempt at recycling. Cinder blocks were segregated from other materials and sent to a Michigan firm which crushes them and produces a cement/limestone type mixture which is used for grading and fill work. Also, a new business located immediately north of the Site was allowed to claim some clean timbers from the building.

- In September 1999, as WKL building dismantlement progressed, a search was conducted for an underground tank believed to be on the Site. The tank was found about twenty feet south of the former building. The MDEQ made arrangements for a specialist in underground tank work from one of their district offices to be on-site at this time. Based on depth of fluid within the tank, and reference chart usage for the type/volume of tank, it was calculated that there were about 170 gallons of fluid within the tank. The fluid was pumped into waste drums, and arrangements were made for disposal. While the fluid was reported to be probably mostly old boiler fuel oil and water, there was the possibility of solvent contamination as well. Hence, the fluid was handled as though it was a hazardous waste.
- Work also progressed at the site of the treatment building. By mid-September, the foundation had been dug, and structural materials for the building were delivered to the Site.
- What had been the former discharge/seepage lagoons were bulldozed and graded to conform with nearby land elevation. A few scrub trees that had grown in this area

were taken down, chipped, and the resulting mulch put down and covered with soil used for final grading purposes.

 By October 1999, the original construction contract entered into by the MDEQ and the construction contractor had expired with many important elements of the work not yet completed. A restructuring of the contractual documents and a restating of financial obligations thereunder were necessary.

The State of Michigan began the task of revising the needed contractual documents, and retaining vendors to supply and install the major system components still requiring work. Negotiations with the previous construction contractor were required to determine amounts due, liquidated damages, and assess what portion of tasks remained to be done. After such assessment, revised design information was prepared to reflect such information to potential new project bidders. By June 2000, this revised design information was largely prepared, with further refinements reflected in addenda dated July 5 and July 21, 2000 and distributed to parties of interest. An opportunity for potential bidders to meet at the Site was conducted on June 27, 2000. Potential bidders were asked to submit project qualification information.

Following review of qualification materials, bids were opened on August 2, 2000. Notice to proceed was given August 3, 2000, with new contracts officially awarded August 14, 2000. Taking into account the stated desire within the bid package that construction be completed as soon as possible, decision was made as to most responsive bid. Great Lakes Carbon Treatment, Inc. was contracted for construction activities and O&M.

- As of early August 2000, remaining construction tasks included drilling and
  installation of groundwater MWs (200 Series) and the SVE wells; conduct of further
  aquifer testing; further clearing and grading; arrangement for hookup of such utilities
  as gas, water, and electricity; trenching and underground pipeline installation;
  installation of pre-cast concrete; instrumentation and control set up; electrical work;
  procurement and set up of activated carbon water and soil vapor emission control
  units; various mechanical work; and systems testing and start-up.
- As of August 22, 2000, most of the discharge line to the recharge lagoon area had been installed. Lagoon aprons had been formed and poured. A potable water line to the treatment building was installed. Drillers finished installing the 200 Series groundwater monitoring network wells.
- During the week of August 28, work proceeded on directional boring of the
  forcemain, installation of SVE wells, lagoon riprap, and electrical installation within
  the treatment building. During the course of this summer's construction, some slight
  alteration in actual construction had taken place compared to design drawings.
  Thus far, these changes have been minor and were done in order to route the

discharge lines to the lagoons in a manner resulting in less tree removal, and altering influent pipeline runs from extraction wells EW1 and EW4 to avoid a nearby power pole and limit potential for any damage to private property, respectively.

- By September 12, 2000, soil vapor extraction wells SV3 and SV4 had been installed. Groundwater monitoring wells MW201, MW204, MW211, and MW215 had also been constructed to supplement the existing monitoring well network. Hook-up of a transformer to a power line to serve the treatment building was underway. Heating, ventilation and air conditioning sheet metal installation was begun, following installation of the natural gas line to the treatment building. A 72-hour aquifer pump test was conducted, with test results relayed to the MDEQ and engineering firm hydrogeologists. Interpretation of pump test results slightly affected location of groundwater extraction wells EW2 and EW5, as well as selection of pump motor size utilized at these locations. In the weekly progress meeting, ideas were also exchanged on merits of alternative means of applying interior coatings, as well as further consideration of flanges best suited for covers associated with installed wells. Concrete curing times had progressed sufficiently on pad areas that delivery and set up of heavier treatment equipment could begin.
- By September 28, 2000, all SVE wells had been installed, along with granular activated carbon treatment equipment. Extraction well EW1 has been installed. Results from a pump test were undergoing review. Test boring findings at the proposed location for well EW5 indicated a predominantly clay layer about 60 feet below the ground surface which was 4-6 feet thick. The parties involved in system construction considered whether it was better to alter some extraction well construction to have the well screen straddle this clay layer, or whether at limited locations there would be an EW cluster, with a shallower well screened above the clay layer and a deeper well screened below the clay layer.
- During October 2000, the MDEQ arrived at the decision that remaining groundwater extraction wells/intake screens should penetrate the clay layer when such soil is encountered, as opposed to creating well clusters screened only in more permeable soils above and below the clay layer. Installation of the remaining five groundwater EWs began the week of October 23<sup>rd</sup>. In considering depth to primary groundwater contaminants of concern, extraction well EW2, near the former WKL building area, was adjusted to be somewhat shallower than initially projected. Down-gradient extraction wells EW4, EW5, and EW6 were adjusted to be slightly deeper than initially planned to account for the sinking action of contaminants in the aquifer. During October 2000, the MDEQ conducted sampling of the groundwater MW network, to establish a baseline relatively shortly before anticipated start-up of the groundwater treatment system.
- A pilot boring drilled at the EW4 location indicated interbedding of clay and coarser soils at a depth of 90 feet below the ground surface. Clay encountered at this location was not as thick as that noted at the EW5 location. Nevertheless, after

considering the matter with the engineering firm and construction contractor, the MDEQ indicated that remaining groundwater EWs should be installed using the mud rotary drilling method. This technique should alleviate any problems of fine soil particles from plugging well screens and causing a loss of well extraction efficiency. Vertical aquifer sampling was conducted at the EW4 pilot boring to a depth of 130 feet.

- In early December 2000, mud rotary installation of extraction wells EW5 and EW2
  was underway. Following completion of these wells, a 72-hour pump test was
  planned, with results being used to "tweak" the optimal location of EW4 and EW6.
- By January 2001, extraction wells EW2 and EW5 were installed. A pump test was conducted during the week of January 15, 2001. Because of generator failure about 20 hours into the 72-hour test, the test needed to be re-started and the data loggers reset.
- Individual inspections have been conducted for electrical and instrumentation systems, with satisfactory results. However, a vent on the roof of the treatment building leaked, and needed caulking.
- By February 23, extraction wells EW4 and EW6 were installed. Step tests were conducted to help obtain field data to calculate optimal extraction rates at these wells.
- A major Site progress meeting was conducted March 6, 2001. By then, rates of
  extraction had been determined. The parties reviewed troubleshooting measures
  taken to date. Also, following consideration of the matter, "off the shelf" pumps
  meeting extraction rate needs were ordered for four of the five extraction wells.
  Only well EW2, in the most contaminated area of the plume, is believed to need a
  retrofitted, customized pump.
- Full system start-up occurred the week of April 16, 2001, following a 72-hour system demonstration period to evaluate the system for full operation, and make any necessary adjustments.
- In support of the groundwater treatment system and to further define the
  groundwater contaminant plumes, additional MWs, designated as 300 Series wells
  were installed in 2002. In total, there are 49 MWs installed at various depths within
  the surficial aquifer. Hydrogeologic and chemical data obtained from those wells are
  used for long-term trend monitoring of contaminant concentrations and to help
  evaluate the effectiveness of the groundwater treatment system.

#### Operation and Maintenance

O&M activities performed by subcontractors to the State of Michigan include conducting groundwater and air sampling and reporting in accordance with air and groundwater substantive requirements documents. Other tasks include recording water levels from MWs as well as date, time, ambient temperature, and building temperature during Site visits; recording instantaneous flow rate and total flow for each groundwater EW; instantaneous flow and total flow for each air stripping system; instantaneous flow rate for each CBAS blower; and total run time for each EW pump, CBAS blower, and discharge pump. Record air pressure and temperature from the following locations in the SVE treatment process: pre-flow meter, across the air filter, pre-blower, post-blower, post-silencer, pre-granulated activated carbon (GAC) and post-GAC units, and at the discharge. O&M also consists of recording total gas usage, electrical and water usage, operational status of all heating and ventilation equipment, alarm conditions and actions taken, and recording air/water separator sight glass water level, as well as scheduled maintenance on the treatment systems as recommended by the manufacturer and maintenance of the building and mowing of the grass.

Sampling is conducted on a quarterly basis from the EWs, CBAS effluent, and the discharge lagoon, while air samples are collected from the SVE wells. The air strippers are currently cleaned approximately once every six weeks. Other O&M tasks include collecting groundwater samples from the monitor wells generally on a semi-annual basis to evaluate possible trends in data, and collecting residential well water samples.

The MDEQ retained consulting contractor services to oversee construction quality, and to compile operating experiences gathered from interviews with operating personnel. Many of the issues of importance were compiled in O&M reports, as well as in various volumes of the Remedial Action Report prepared in 2003. Some of the initial O&M issues included:

- SVE wellhead-induced vacuum Review of data and discussions with operating
  personnel indicated that initial operation of the SVE system may have been
  conducted with inappropriately incremented pressure gauges. This was eventually
  corrected. One reason for the importance of proper measurement is in determining
  if the expected radius of influence for the SVE wells is attained.
- In referring back to suppliers' literature, it was determined that it is necessary to recalibrate flow meters and flow sensors after electrical storms. This step has now been added to the overall treatment plant O&M manual.
- While iron is not a key Site contaminant, nevertheless concentrations of iron in the
  discharge lagoon were running over desired criterion. To help minimize additions of
  unwanted iron into the system, it was determined that good routine maintenance
  practice should include keeping trays in the air stripper units clean. There is the

possibility of flaking off of metal deposits from the trays otherwise. The trays are now cleaned approximately once every six weeks.

- The flow meter at groundwater extraction well EW2 was found in 2002 to be faulty and proper wiring and recalibration were necessary.
- Extraction Well EW2 was not running continuously due to insufficient groundwater.
- The water level data is not sufficient to identify the area of influence of the EWs. Also, the potentiometric surface maps for the shallow and deeper wells show that the cones of depression for the EWs can not be clearly defined because there does not appear to be enough MWs in the vicinity of the EWs.

A December 2002 report compiled by the MDEQ's oversight contractor discusses monthly operational experiences from the time of system start-up. In examining remarks for the SVE system, it is noted that by September 2001 there was an increase shown in contaminant concentrations in the SVE wells, indicating that movement of soil gas towards the SVE wells was occurring and that the wells were indeed located in VOC-contaminated areas.

A Construction Quality Assurance Plan (CQAP) was prepared in conjunction with the RD to address the activities necessary to ensure compliance with the requirements of the remedy. The protocols contained in the CQAP were employed during construction to ensure that the treatment system would perform in accordance with the ROD and RD plans and specifications. Details of the procedures used to ensure the quality of the construction work are contained in the approved CQAP.

The groundwater monitoring program implemented during the O&M phase was performed in accordance with the approved Quality Assurance Project Plan for O&M. The laboratories used for the analysis of the groundwater samples were determined to be acceptable for use by the U.S. EPA Region 5 Environmental Sciences Division based on previous laboratory audits.

#### Monitoring Results:

Groundwater samples were initially planned to be collected on a quarterly basis, but analytical results were to be reviewed to determine if that sampling frequency was appropriate. Some wells were in fact sampled on a quarterly basis during the early stages of O&M; however, during the past four to five years of O&M, groundwater samples were collected generally on a semi-annual basis. Monitor wells are installed both shallow and deeper within the surficial aquifer; however, it should be noted that due to the complex geology consisting of discontinuous layers of cohesive soils within the fine- to medium-grained site soils, contaminant plume characterization and monitoring across the Site with the existing network is not adequate. Nonetheless,

groundwater analytical results collected to date indicate that the highest contaminant concentrations are in the vicinity of the former WKL building, near monitoring well MW101S and extraction well EW2. The contaminant concentrations near the former WKL building indicate a significant source area remains in that portion of the Site, and contaminant concentrations in groundwater have actually increased in that portion of the Site (i.e., locations of EW-2, MW-4) since the treatment system became operational. Monitor Well MW-4 is located down-gradient of the former WKL building, but up-gradient of the EWs. Based on the very high concentrations of PCE detected, this may suggest the presence of non-aqueous phase liquid (NAPL).

Contaminant concentrations at MW locations closer to the EWs, such as MW-212S and MW212D generally show stable or decreasing concentrations. The plume extends in the approximate north or northeast direction to locations beyond the most downgradient EWs. It is not clear if the contamination beyond the EWs is a result of inadequate capture. Figures 4 and 5 include recent chlorinated ethane concentrations in shallow and deeper zones of the surficial aquifer as well as the estimated extent of contamination based on the existing dataset, and also depict estimated contaminant flow patterns.

Previous O&M reports have indicated and the current groundwater dataset support that a capture zone study should be conducted to evaluate if there is indeed adequate groundwater capture (no "breakthrough" and down-gradient migration of contaminated groundwater). Additional MWs and piezometers at select locations are recommended to better define the extent of impact, to determine the capture zone of the existing groundwater treatment system, and additionally, to optimize the groundwater monitoring network (GMN) and sampling requirements for future sampling events and to ensure protectiveness in the long-term. A Long-Term Monitoring Network Optimization Evaluation (LTMNO) was recently completed (June 2006) by Parsons, for the U.S. EPA. The LTMNO recommendations for additional MWs in both shallow and deeper portions of the surficial aquifer are appropriate and necessary to ensure protectiveness.

Based on the maximum pumping rate of less than five gallons per minute (gpm) in extraction well EW2 and the contaminant concentration present in that area near the former WKL building, additional source delineation and hydrogeologic data are recommended for that area of the Site to evaluate if additional measures such as in-situ treatment technologies and/or additional EWs are necessary to achieve the RAO of residential cleanup criteria (i.e., 5 micrograms per liter [ug/L] for PCE). Based on the data that have been collected to date it is unlikely that the groundwater RAO's can be achieved for the entire Site in a reasonable timeframe using the current groundwater treatment system. It is not known if or to what extent the groundwater contaminant plume is migrating past the EWs.

Analytical results obtained during O&M of the SVE treatment system indicate that the SVE system has reduced the contaminant concentrations to barely detectable levels of

VOCs. If these results continue to be duplicated, it would be appropriate to consider if further RA is necessary for those soils. One additional year of quarterly monitoring is recommended to confirm the most recent results.

Tables summarizing the analytical data from groundwater samples collected from the MWs are included as Table 3. The most recent groundwater data obtained from samples collected from the groundwater EWs are included as Table 4. The most recent SVE data are included as Table 5.

Continued monitoring using a comprehensive and appropriate GMN will be of primary importance to confirm protectiveness and to evaluate progress toward RAOs. In order to have an appropriate network of MWs, the additional wells proposed in the Parsons report should be installed. Without that data, the protectiveness of the remedy can not be adequately estimated.

## VI. Progress since the last Five-Year Review

This is the first Five-Year Review report to be completed for the WKL Site.

#### VII. Five-Year Review Process

#### **Administrative Components**

The WKL five-year review was led by Keith M. Krawczyk, the MDEQ State Project Manager for the Site, in collaboration with the U.S. EPA Remedial Project Manager, Russell Hart. The five-year review consisted of a site inspection, review of relevant data and documents, and conducting interviews.

#### Community Notification and Involvement

Based upon prior community involvement, it was decided to publish a notice in the local newspaper that the five-year review was being conducted. The public notice was published on June 19, 2006, in the Lake County Star and also in the Freeway Shopper's Guide. Neither the MDEQ nor the U.S. EPA received any responses from the public. The completed Five-Year Review Report will be placed in the information repository and a notice will be published in the Lake County Star notifying the community of the completion of the five-year review. It will also be found at the U.S. EPA's website at www.epa.gov/region5/superfund/fiveyear/fyr index.html.

Residential well samples are collected on an annual basis from residents in the vicinity of the Site that elected to not hook up to water supply.

#### **Interviews**

On June 29, 2006, an interview was conducted with Mr. William Pierce, of Great Lakes Carbon Treatment, Inc. Mr. Pierce was the Senior Project Manager for the construction and O&M of the SVE and groundwater treatment systems from implementation through April 2006.

Mr. Pierce was asked for a general overview of construction activities and he responded by indicating that the State supplied the equipment and that the components used were of high quality. Some modifications regarding the spacing of equipment were necessary as a result of the building being built slightly smaller than specifications. Mr. Pierce mentioned that one extraction well (EW3) was not installed due to cohesive soils encountered at the proposed location, and that the location of EW5 was moved to provide better capture. Pumping rates of the wells were reduced from the original plan as the wells were drawn down easily and would run out of water. Over a short time, the pumping rate was fine-tuned to pump at maximum capacity.

Mr. Pierce was asked if he would make any changes to the RD. Mr. Pierce mentioned that the carbon vessels were removed approximately three years ago because the contaminant concentrations were low enough where carbon treatment was no longer needed. Mr. Pierce also suggested that the RD could be fine-tuned to reduce costs, indicating that all groundwater (approximately 250 gpm) currently being pumped could be pumped through a single air stripper, thereby reducing energy costs by 50 percent. Mr. Pierce indicated that energy is the largest monthly O&M expense.

Mr. Pierce was asked if there were any issues affecting O&M. He responded by indicating the power supply is located at the end of the three-phase power line, and that there have been numerous power outages over the past six years. Although the service has improved and power outages are now infrequent, a three-phase power surge protector would be a good idea.

Mr. Pierce was asked if the remedy was functioning as expected. He indicated that the "up and running time" was good and the system was still pulling in contamination, but it is not clear if the system is keeping the groundwater contaminant plume from migrating. Mr. Pierce stated that although a lot of mass of contamination has been removed, the contaminant mass was never estimated, and it is not known how much contaminant mass is present and that doing so would be difficult due to the complex lithology. Mr. Pierce indicated that another technology used to break down the source material would significantly reduce the expected treatment time and long-term O&M costs. In support of this, Mr. Pierce stated that the current pump and treat technology will only do what the formation allows, and it is pumping at the maximum rate now. Mr. Pierce suggested a pumping test is needed to estimate groundwater capture, and that it has not been determined to his knowledge if impacted groundwater was migrating into or beneath the Middle Branch of the Pere Marquette River.

Mr. Pierce was also asked if he was aware of any health and safety issues during the construction and O&M phases of the project. He stated that health and safety issues, permitting and reporting requirements have been met throughout the remediation process.

The MDEQ also interviewed Mr. Robert Jelinski who is a co-owner of an adjacent business at 9161 South M-37. Mr. Jelinski operates the public water supply system for the Clean Water Association which is the water supply for local residences.

Mr. Jelinski was unsure of the exact sampling schedule for the water supply, and indicated that even though the results vary somewhat, overall the results were good. Mr. Jelinski mentioned that there has been difficulty getting payment from some residents for the water supply; otherwise, he felt that operation of the water supply system has been good, requiring only routine maintenance issues such as replacing pumps being required. There is no backup generator for the water supply and historic power outages have resulted in interruptions of the water supply.

#### Site Inspection

An official site inspection was conducted on June 30, 2006. The MDEQ, U.S. EPA, and Tim Schallhorn of Lakeshore Environmental, Inc. (Lakeshore), the State's O&M subcontractor, were on-site for the inspection. Mr. Schallhorn is the current Director of Operation Systems for continuing O&M at the Site. The purpose of the inspection was to physically observe all aspects of the Site, from site security to the integrity of well casings and a review of the SVE and groundwater pump and treat systems.

**Site Security:** The treatment building and water supply building are locked to prevent trespass. Access to the Site is not restricted, and the property owner of the land where the discharge lagoons are located (Dr. Charles Wolgamott) indicated that there has been trespassing by off-road vehicles, in particular, in the area of the discharge lagoons. Although trespassing will not affect protectiveness of the remedy, access control should be implemented to address potential liability issues and to prevent possible property damage. An evaluation of access control should be incorporated to preclude trespassing onto the Site, in particular, in the area of the discharge lagoons.

Remediation Equipment: The inspection revealed that all equipment associated with the soil vapor and groundwater extraction systems appeared to be in good working order and well maintained. Tim Schallhorn reported that a leak in the roof of the treatment building had been observed, and based on discussion during the site inspection; Lakeshore was authorized to determine the source of the leak, estimate repair costs, and then was authorized to fix the roof to prevent damage to system components. Recent modifications to the SVE manifold/valve vault were inspected. The modifications were completed to locate the sampling ports near the vault cover, thereby negating confined space entry into the vault.

**Monitoring and Extraction Wells, SVE ports:** All wells and SVE ports were inspected during recent sampling events and appear to be in working order, with intact protective casings.

#### Document and Data Review

The State Project Manager reviewed relevant documents including the RI/FS, ROD, ESD, Construction Completion Report, Remedial Action Report, monthly O&M reports, the LTMNO Evaluation, and data evaluation of the sample and monitoring events. The MDEQ completed this Five-Year Review based upon the information obtained from these sources and activities. The documents and data reviewed in preparing this Five-Year Review are listed at the end of this report as Attachment 1.

#### VIII. Technical Assessment

# Question A: Is the remedy functioning as intended by the decision documents? YES

#### Remedial Action Performance

The review of documents, applicable or relevant and appropriate requirements, monitoring data and the results of the site inspection indicate that the remedy is functioning as intended by the ROD and ESD; however, in order for the remedy to continue to be considered protective of human health and the environment, institutional controls (IC) need to be implemented and the recommendations and follow-up actions identified in this report need to be completed.

Soil contaminant concentrations appear to have been reduced and the most recent results from sampling of the SVE wells show that contaminant levels are barely detectable (Table 5), thereby suggesting that the SVE system may have substantially remediated soils. It is recommended that operation of and quarterly monitoring of the SVE system be continued for a period of one year and then, if results continue to show only trace concentrations, confirmatory soil samples should be collected to confirm if results meet the RAO's of Part 201 residential cleanup criteria for unrestricted use. Alternatively, if isolated contamination remains, the system could be modified to focus on any remaining hot spot areas.

A significant amount of contaminant mass has been removed via the groundwater extraction system and analytical results of many samples, especially those closer to the EWs, indicate that concentrations have remained stable or decreased since the treatment system became operational. However, contaminant concentrations (e.g., PCE) are increasing at locations near or just down-gradient of the former WKL building. Concentrations of PCE at the location of extraction well EW-2 and monitor well MW-4, for example, have increased since the system become operational. PCE concentrations at EW-2 were approximately 100 ug/L when the system became

operational, but in 2006 they are approximately 3,000 ug/L. PCE concentrations at MW4 between the years 2000 to 2002 were below or slightly above the criteria for PCE, but sample results from 2006 show they have steadily increased to 490 ug/L. The RAO's for PCE and TCE is the residential drinking water criteria of 5 ug/L.

Groundwater data and results from the residential well sampling suggest the remedy is currently protective. In order to evaluate protectiveness, the GMN needs to be enhanced by adding monitoring locations as detailed in the Parson LTMNO Report. Better definition of the extent of contaminated groundwater is necessary, as is demonstrating adequate capture of the contaminant plume. Modifications in the groundwater treatment system should be made, if necessary. In addition, ICs are necessary and the extent to which they will be required (i.e., down-gradient extent) needs to be determined.

The aquifer yields low quantities of groundwater in the impacted zone near the former WKL building, and contaminant concentrations in that portion of the Site have increased since the system became operational. This suggests that the current pump and treat technology will take decades of required treatment, rather than years, to restore the aquifer. As explained in the ESD, no deed restrictions were recorded initially for the Site, but the ESD did include a provision to re-evaluate the need for ICs. Based on the contaminant concentrations and expected duration of cleanup, it is appropriate to conduct an evaluation to determine what ICs are needed to ensure protectiveness, and to develop and execute a plan for implementing appropriate ICs in the near future.

#### System Operation and Maintenance

Operating procedures appear to be adequate to maintain the effectiveness of the SVE remediation system. The current operating procedures for the groundwater treatment system appear to be adequate to continue with the current pump and treat system; however, the flow meter for extraction well EW-2 needs to be replaced with a meter capable of measuring flow at a rate of less than 5 gpm. As previously discussed, the groundwater treatment system may require modification which may theoretically, modify operating procedures.

It was originally estimated that O&M would be three years for the SVE system and 10 years for groundwater. Estimated annual costs with the SVE system operating was \$88,148, and then \$74,663 in years 4-10 with the SVE system off-line. Actual costs incurred annually are generally consistent with those estimates; however, it should be noted that in year five the SVE system is still operating, and that other O&M expenses are incurred annually, in particular, costs for the groundwater monitoring and residential well sampling and analyses. In 2006, the actual estimated O&M costs are approximately \$170,000, when MWs were sampled on only one occasion. It is assumed that based on the groundwater and soil vapor data collected, contractual agreements, trends in contaminant concentrations, etc., a similar expenditure of funds

is necessary for FY 2007, and beyond (even with the assumption that the SVE system comes off-line in FY 2008). Since the treatment systems became operational, total O&M costs have been approximately \$800,000.

Tasks that are necessary to ensure the remedy is protective, and to minimize the duration and costs of on-going O&M include further defining the plume boundaries with the GMN proposed in the LTMNO Report, optimization of long-term groundwater sampling; evaluating and ensuring there is adequate capture of impacted groundwater; and, defining the extent of and then addressing the additional source material near the former WKL building.

Without enhancing the current groundwater treatment system and/or addressing the additional source material (elevated concentrations of PCE near the former WKL building), the low yield of the aquifer in that area of the Site will result in an extremely long period of O&M. The current groundwater treatment system appears to have the capacity to pump and treat a greater volume of water using one air stripper alone, and a much greater capacity using both. It may be possible to eliminate the second air stripper as a cost saving measure if it will not be needed. It is likely that overall O&M costs could be greatly reduced by addressing the issues mentioned above.

## Implementation of Institutional Controls and Other Measures

Consistent with the ROD and ESD, it is appropriate to now conduct an evaluation to determine if ICs and other measures are now necessary at this Site, given the likely lengthy duration of continuing O&M.

Access restrictions to prevent trespassing into the discharge lagoons in particular and to discourage trespassing in other areas of the Site should be evaluated.

ICs are non-engineered instruments, such as administrative and legal controls that help to minimize the potential to exposure to contamination and that protect the integrity of the remedy. ICs are required to assure protectiveness for any areas which do not allow for unlimited use or unrestricted exposure.

At the WKL Site, it is not necessary to utilize ICs for soil management. The SVE system is very close to attaining ROD/ESD soil cleanup goals. However, it is prudent to consider ICs with regard to Site groundwater management. Even though progress in lowering contaminant concentrations has occurred at several monitoring points, extraction and treatment may need to be undertaken for several years to come.

Hence, the MDEQ and U.S. EPA will work to create an IC Plan, to be initiated within six months of signature of this Five-Year Review Report. The IC Plan should include such items as:

- A site map identifying the drinking water source for each residential, commercial or industrial property;
- The identification of all parcels potentially threatened by groundwater contamination at and from the Site:
- An evaluation of whether, as a condition of using the alternative deep zone water supply, property owners agreed to groundwater use restrictions on their properties;
- An evaluation of the effectiveness of any such voluntary use restrictions;
- An evaluation of whether the alternative deep zone water supply is sufficient to serve all properties potentially threatened with groundwater contamination from the Site;
- The development of an appropriate restrictive covenant, running with the land, to
  protect against the use of groundwater for drinking water purposes at any potentially
  affected parcel until such time as the MDEQ and the U.S. EPA determine that such
  use restrictions are no longer necessary;
- The development of a strategy for implementation of such use restrictions;
- The development of a communications plan to facilitate cooperation with local government stakeholders;
- An evaluation of any current zoning or other governmental restrictions that limit a property owner's ability to use a private well for drinking water purposes; and
- An evaluation of what use and access restrictions, if any, are necessary to protect the groundwater extraction and treatment system at the Site.

The above items will be implemented in a reasonable time frame, with modifications dictated by pertinent site developments and conditions.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy still valid? YES.

#### Changes in Exposure Pathways

There have been no changes in the potential exposure pathways at the Site since the implementation of the remedy for the Site. The groundwater contaminant plume should be further defined to confirm that no human health or ecological routes of exposure or other receptors are present. The additional monitoring locations identified in the LTMNO Evaluation should be conducted in an attempt to confirm impacted groundwater is not migrating further down-gradient, into or beneath the Middle Branch

of the Pere Marquette River, or toward other receptors.

#### Changes in Toxicity and Other Contaminant Characteristics

Cleanup criteria were originally established for this Site in the ROD. Modifications to the remedy, as well as the cleanup criteria were made in the ESD, as discussed earlier in this report. No changes in criteria have been made, either at the Federal or State level, which would call into question the protectiveness of the remedy. Neither the toxicity factors for the COC nor other contaminant characteristics have changed in a way that could affect the protectiveness of the remedy.

#### Changes in Risk Assessment Methods

Standardized risk assessment methods have not changed in a way that could affect the assessment of the protectiveness of the remedy.

#### **Expected Progress Toward Meeting Remedial Action Objectives**

With regard to the soil contamination, the SVE system greatly reduced contaminant concentrations and it appears as though the soil remediation objectives are, or will be, met in the near future.

With regard to the progress of the groundwater cleanup, given the remaining source area present in the shallow aquifer near the former WKL building and the contaminant concentrations, progress is likely to be very slow. It should be determined if enhancing the current groundwater treatment with other remedial options such as in-situ treatment to destroy the significant remaining source material is needed, and/or if adding EWs could make progress toward meeting RA objectives for groundwater obtainable in a reasonable time frame.

# Question C: Has any other information come to light that could call into question the protectiveness of the remedy? NO

#### Technical Assessment Summary

There has been no newly identified human health or ecological risks, impacts from natural disasters, or any other information that has been identified that could affect the protectiveness of the remedy for the Site. It is possible that the additional data collection will show that the extent of impacted groundwater is greater than anticipated, and/or that contaminant flow paths are different than currently estimated.

## IX Issues

Issue	Currently Affects Protectiveness (Yes/No)	Affects Future Protectiveness (Yes/No)	
Extent of Contamination not fully defined	No	Yes	
Groundwater Capture Zone Uncertainties	No	Yes	
An Additional Area of Source Material	No	Yes	
Presence of Inorganics in Groundwater	No	Yes	
No Institutional Controls (IC)	No	Yes	
Frequent Power Outages	No	Yes	

## X. Recommendations and Follow-up Actions

The following Table summarizes the Issues, Recommendations and Follow-Up Actions.

Issue	Recommendations/ Follow-Up Actions	Party Responsible/ Oversight Agency	Milestone Date	Affects Protectiveness (Yes/No)	
				Current	Future
Incomplete GMN	Additional monitoring points installed within the aquifer are needed	MDEQ/U.S. EPA	2007	No	Yes
Capture Zone uncertain- ties	Conduct capture zone study	MDEQ/U.S. EPA	Within 180 days of 5- Year Review	No	Yes
Additional Source Material	Define and evaluate treatment options	MDEQ/Ū.S. EPA	2007	No	Yes
Inorganics present in ground- water	Annual evaluation to determine if treatment is warranted.	MDEQ/U.S. EPA	Annually, starting April 1, 2007	No	Yes
No ICs	Complete IC study	MDEQ/U.S. EPA	April 2007	No	Yes
Power Outages	Install Surge Protector	MDEQ/U.S. EPA	Within 60 days of 5- Year Review	No	Yes

## XI. Protectiveness Statement

The remedy was constructed in accordance with the ROD and ESD.

In order for the remedy to continue to be considered protective of human health and the environment, ICs (e.g., groundwater protection zones, well-drilling restrictions) are needed to prevent exposure to contaminants until soil and groundwater cleanup standards are achieved, and recommendations and follow-up actions identified within this report need to be completed to further define the extent of impact. Long-term protectiveness will be achieved once the pump and treat system reaches cleanup levels (e.g., MCLs, State standards) in the groundwater.

#### XII. Next Five-Year Review

This next five-year review will be completed by September 30, 2011.

**Tables** 

Table 1

Chronology of Site Events (Refer to Page 6)

### Table 2

Components of ROD/ESD Remedy Conduct Change (Refer to Page 14)

### Table 3

Groundwater Quality Analytical Data-Groundwater Monitoring Wells

MW 2D		1								<del> </del>		
10144 25	Action	ļ	Dates San	nled				-				<b></b>
Inorganics	Level (1)	-	10/01/97	04/01/98	11/01/98	<b>10</b> /01/00	11/20/01	05/02/02	05/02/02	09/06/02	10/21/03	4/5-6/06
Boron - Dissolved	500	F_	950	900	×990	NM	NM	NM	NM	NM	NM	NM
Boron in Water	500		NM	914	1040	840	380	670	670	500	92	NM
Calcium in Water	NA	-	NM	NM	NM	57.8	NM	NM	NM	NM	NM	NM
Chromium - Dissolved	100	Α.			K 1.0	NM	NM	NM	NM	NM	NM	NM
Chromium by Furnace	100		NM	K 1.0	1.5		<1.0	1.3		K 1.0	ND	ND
Iron Dissolved	300		280	300	349	NM 2	NM	NM	NM	NM	NM	NM
Iron in Water	300		NM	400	380		480	- 660	660	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	500	86
Lithium - Dissolved			1		K 8		NM	NM I	NM	NM		
Lithium in Water	170 170	<u> </u>			K 8	NM	NM	NM	NM	NM	NM	NM NM
	400000	<del> </del>	NM	NM	NM	<10	1				NM	
Magnesium in Water		_		K 0.2	K 0.2	22		NM	NM	NM	NM_	NM
Mercury - Dissolved		A	K 0.2 HT			NM	NM	NM	NM	NM	NM_	NM
Mercury in Water		A	NM	_	K 0.2	<0.2 HT	NM	NM .		K 0.2	NM	NM
Potassium in Water	NA 50	<u> </u>	NM	NM	NM	1.2		1.1	1.1		0.9	NM
Selenium by Furnace	50	A	NM	NM	NM	<1.0	NM	NM	NM	NM	NM NM	NM
Sodium in Water	125000		NM K 50	NM	NM	72.4	NM	NM	NM	NM	NM NA	NM
Aluminum - Dissolved		<u></u>	<del> </del>		84	NM	NM OOF	NM	NM 400	NM	NM	NM
Aluminum - Total	50		NM	62		1440 DL	295	385	408	380	280	ND
Antimony - Total		Α	NM	NM		<1.0	NM	NM	NM	NM	NM	NM
Arsenic - Dissolved		-	K 1.0		K 1.0	NM	NM	NM	NM	NM	NM	NM
Arsenic - Total	50				K 1.0	1.6		NM	NM	NM	NM	9.5
Barium - Dissolved	2000		55	55	63	NM	NM	NM	NM	NM	NM	NM
Barium - Total	2000		NM	57	67	64		NM	NM	NM	NM	NM
Berylium - Dissolved			K 1	K 1	K 1.0	NM _	NM	NM	NM	NM	NM	NM
Berylium - Total		Α		K 1		<1.0	NM	NM	NM	NM	NM	NM
Cadmium - Dissolved			K 0.2	K 0.2	K 0.2	NM	NM	NM	NM	NM	NM	NM
Cadmium Total		Α	NM		K 0.2	0.5		NM	NM	NM	NM	NM
Cobalt - Dissolved	40	1		K 15	K 15	NM	NM	NM	NM	NM	NM	NM
Cobalt - Total	40		NM	K 15	K 15	<15	NM	NM	NM	NM	NM	NM
Copper - Dissolved			K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM
Copper - Total	1000		NM	K 1.0	K 1.0	6.6		NM	NM	NM	NM	NM
Lead - Dissolved			K 1.0	K 1.0	4.2	NM	NM	NM	NM	NM	NM	NM
Lead - Total	4	1	NM	18		39		49	47		22	
Manganese - Dissolved	50		36	33	39	NM	NM	NM	NM	NM	NM	NM
Manganese - Total	50	E	NM	41	380	47	20	36	36	29	55	36
Molybdenum - Dissolved	37	ļ	K 25	K 25	K 25	NM	NM	NM	NM	NM	NM	NM
Molybdenum - Total	37		NM NM	K 25	K 25	<25	NM	NM	NM	NM	NM	NM
Nickel - Dissolved	100		3.3	K 2.0	2.9	NM	NM	NM	NM	NM	NM	NM
Nickel - Total	100	Α	NM	2.1	2.6	6.9	4	5.6	5.8	3.3	3.9	ND
Silver - Total	34		NM	NM	NM	<0.5	NM	NM	NM	NM	NM	NM
Strontium - Dissolved	4600		310	280	340		NM	NM	NM	NM	NM	NM
Strontium - Total	4600		NM	300	360		NM	NM	NM	NM	NM_	NM
Thallium - Total	2	Α	NM	NM	NM	<2.0	NM	NM	NM	NM	NM	NM
Titanium - Dissolved	NA	ĺ	K 10	K 10	K 10	NM	NM	NM	NM	NM	NM	NM
Titanium - Total	NA		NM	K 10	K 10	95 DL	NM	NM	NM	NM	NM	NM
Vanadium - Dissolved	4.5	ļ	K 10	K 10	K 10	NM	NM	NM	NM	NM	NM	NM
Vanadium - Total	4.5		NM	K 10	K 10	<10	NM	NM	NM	NM	NM	NM
Zinc - Dissolved	2400	ĺ	190	47	520	NM	NM	NM	NM	NM	NM	NM
Zinc - Total	2400		NM	4040		5310 DL	12000 DL	17200 DL	10900 DL	4960 DL	4500 D	1200 E
Volatile Organic Compoun	ds											
		į	_	_	ļ				ļ	_		<u>                                     </u>
trans-1,2-Dichloroethylene			ND	ND		1.9 J	2.6	2.1	1.9			ND
cis-1,2-Dichloroethylene	70						T. Control of the Con	3				
Trichloroethylene		Α	<u>6</u> 0		78	. 🔩 170		59			44	
Tetrachloroethene		Α	160		160	68		110	110		28	
2-Butanone	13000		ND	ND			3.2		I	i İ	ND	ND

									Results in	ug/i										
MW 3S		T		Τ												<del></del>		т		
	Action	Dates Sa	mnled	<del>+</del>	+	<del>-</del> -				– – –	<del> </del>					:		+	ļ	
Inorganics	Level (1)		04/01/98	11/01/98	05/14/99	05/14/99	10/01/00	08/08/01	08/08/01	11/20/01	02/26/02	05/02/02	09/06/02	12/05/02	03/27/03	06/19/03	10/21/03	8/23-24/04	3/29-30/05 4	/5-6/06
Boron - Dissolved	500	F NM	K 20	K 20	22	21	NM	NM	NM	NM.	NM	NM	NM	NM -	NM	NM :	NM	NM	NM	NM
Boron in Water		F K 20	25					24		<20	33		K 20	49		ND .	ND	ND	ND	NM
Calcium in Water	NA NA	NM	NM 2	NM	NM F	NM 23	64	NM Z-4	NM	NM	NM	NM 23	NM	NM	NM	NM	- NM	NM	72	NM
Chromium - Dissolved	100		2 K 1.0	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	270	l . j	NM	NM	NM	NM	NM	NM /Z	NM
Chromium by Furnace	100		INT	320	L			67		310 DL	1	250 DL	28	9	25	28	1.5	-1		ND
Iron Dissolved	300		K 20		K 20	K 20	NM	NM	NM	NM	NM OG	NM	NM 20	NM 9	NM 25	NM ZO	NM	NM	NM	NM
Iron in Water	300		547.00			1	1	330		3800		2600	L			120	ND	2000		ND
Lithium - Dissolved	170	K 8.0	K 8.0	K 8	K 8	K 8	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM		NM	NM
Lithium in Water	170	NM	K 8.0		' K 8	K 8	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Magnesium in Water	400000	NM	NM	NM	NM	NM	15.7	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	16.6	NM
Mercury - Dissolved		A K 0.2 HT	K 0.2	K 0.2	K 0.2	K 0.2	13.1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Mercury in Water	2	1	K 0.2	K 0.2	K 0.2	K 0.2	<0.2 HT	NM	NM	NM	NM	NM	K 0.2	NM	NM	NM	NM	NM	ND	NM
Potassium in Water	NA 2	NM	NM	NM	NM	NM	0.8	1	14141	0.4	I .	0.5	i <del>i</del>	0.6		0.5	0.3	i	i ·	NM
Selenium by Furnace	50	1	NM	NM	NM	1	<1.0	NM	NM '	NM	NM 0.6	NM	NM 0.5	NM	NM	NM	NM	NM	ND ND	NM
Sodium in Water	125000	NM	NM	NM	NM	NM	31.4	NM	NM	NM	NM	NM	NM	NM	NM	NM -	NM	NM	133	NM
Aluminum - Dissolved		V K 50	K 50	-1	K 50	K 50	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Aluminum - Total	50			10000 DL	2000	1		K 50	K 50	295	1	1 NW 242	1	K 50	ND	ND	ND	_ NM 90		ND
Antimony - Total	6		NM	NM	NM	NM	<1.0	NM	NM	,295 NM	NM S7			NM	NM	NM -	NM		ND	NM
Arsenic - Dissolved	50	-	K 1.0	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	1	NM NM	NM NM	NM	NM		- NM	NM NIM	NM	NM
Arsenic - Dissolved	50		K 1.0	K 1.0	1	K 1.0	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM I	NM	NM NM	ND	ND
Barium - Dissolved	2000		+	i		i		NM	NM	NM	NM NM	NM	NM	NM	NM	NM NM	NM	NM	NM	NM
Barium - Total	2000		3 14 53	1	1	i .	1	NM	NM	NM	NM	NM	NM	NM	NM		NM	NM	30	NM
				K 1.0			NM 19	NM	NM	NM	į.	NM	NM	NM	NM	NM NM	NM	NM		NM
Berylium - Dissolved	1 .1	A K 1	K 1 K 1	K 1.0		K 1.0 K 1.0	<1.0	NM	NM NM	NM	NM NM	NM	NM	NM	NM	NM	NM		NM	NM
Berylium - Total Cadmium - Dissolved	5	A NM	K 0.2	K 0.2	1			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM NM	ND NM	NM
Cadmium Total	5		l .	K 0.2	0.3	1	<0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cobalt - Dissolved	40	K 15	K 15	K 15	K 15	K 15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM NM	NM	NM
Cobalt - Dissolved	40	NM	1	K 15	K 15	K 15	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Copper - Dissolved	1000		8 K 1.0	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Copper - Total	1000	1 —		K 1.0	5		<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM NM	ND	NM
Lead - Dissolved	4		K 1.0	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lead - Dissolved	1	. +		K 1.0	ַן אוו.ט 55	1		K 1.0	K 1.0		<1.0		K 1.0	K 1.0	ND	ND	ND	2.6		ND
Manganese - Dissolved	50	E K 5.0		K 5		K5	NM	NM	NM	NM 2.0	NM	NM Z.Z	NM	NM	NM	NM	NM	NM 2.0	NM	NM
Manganese - Total	50			չլուն ) ա.ո.ս 419	1	ı		7.1	<u> </u>	32		l	K 5.0	K 5.0	ND	ND	ND	25	1 — — —	10
	37	K 25	K 25	K 25		K 25	NM	NM	NM 5.9	NM	NM	NM 32	NM	NM	NM	NM	NM	NM 23	NM	NM
Molybdenum - Dissolved	37				K 25	K 25	<25	NM .	NM	NM		1	NM	NM	NM	NM	NM	NM	ND	NM
Molybdenum - Total		NM		K 25		+		<del></del>	NM	NM	NM	NM NM	NM	NM	NM	NM		NM	NM -	NM
Nickel - Dissolved	100	<del></del>						NM 42			NM	NIVI 88	1			33	NM 16	1		
Nickel - Total	100		1700			+		43		122 NM	30 NM	•	NM	7.8 NM	15 NM	NM	NM	69 NM	4.2 ND	33 NM
Silver - Total Strontium - Dissolved	34	NM	NM 1 51	NM 57	NM	NM 67	<0.5	NM	NM	NM	-	NM NM	NM	NM	NM	NM	NM	NM	NM	NM
	4600	NM	1 51					NM	NM NM	NM	NM NM	NM	NM	NM	NM	NM	NM	NM	110	NM
Strontium - Total Thallium - Total	4600	A NM	NM	NM	NM		+	NM NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND ND	NM
Titanium - Dissolved	NA Z		K 10	K 10	K 10		<2.0 NM		NM	NM	NM	NM	NM	NM	NM		NM	NM	NM	NM
Titanium - Dissolved	NA NA	K 10 NM	52			K 10		NM NM	NM	NM	NM	NM	NM	NM	NM NM	NM NM	NM	NM	ND	NM
Vanadium - Dissolved	4.5		K 10	K 10		K 10	NM 32	NM NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Vanadium - Total	4.5	NM		IN IU				i	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Zinc - Dissolved	2400		— · · · · · · · · · · · · · · · · · · ·				<10 NM	NM NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	2400	<del></del>		146							1			K 10	13	i i	ND	30	+	ND
Zinc - Total		NM	660	4200	3780	8900	17	14		55	17	1 31	12	K IU		20	ָ מַאַנ	30	ND	ND
Volatile Organic Compou	nds												İ							
Tetrachloroethene	5	A 1.	2			<u></u>		ND	ND						ND	ND ;	, ND	ND	ND	ND
Base Neutrals	<u> </u>		<del> </del>		-	<del></del>														
bis(2-ethylhexyl)phthalate	6	A NM	-	+	-			ND	ND						NM	NM	NM	NM	NM	ND
and a surject of the surfect of the	<u> </u>					!	0.0	٠٠١٠				L								

					<del>,</del>				s in ug/i										
MW 3D			L																
Inorganics	Action Level (1)	10/01/97	1 <b>pled</b> 04/01/98	11/01/98	10/01/00	08/08/01	11/20/01	02/26/02	05/02/02	09/06/02	09/06/02	12/05/02	03/27/03	06/19/03	10/21/03	10/21/03	8/23-24/04	3/29-30/05	4/5-6/06
Boron - Dissolved	500 F	21	22	23	NM	NM	NM	NM	 	NM	NM	NM	NM	NM	NM -	NM	NM	NM	NM
Boron in Water	500 F	NM	23	26	NM	K 20	33	31	45	33	NM	50	33	38	36	37	55	31	NM
Calcium in Water	NA	NM	NM	NM	47.3	NM	NM .	NM	NM	NM	NM	NM	NM	NM -	NM	NM	NM	2	NM
Chromium - Dissolved	100 A	K 1.0	1.2	1.1	NM	NM	NM	NM	390	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Chromium by Furnace	100 A	NM	2.2	11	1.1	150	1170 DL	40	370 DL	13.2	NM	K 1.0	ND	ND	2.1	1.6	ND	ND	ND
Iron Dissolved	300 E	K 20		K 20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	- NM	NM	NM	NM
Iron in Water	300 E	NM	60	360	<20	430	11000	410	2600	140	NM	K 20	190	130	32	32	ND	ND	ND
Lithium - Dissolved	170	K 8.0	K 8.0	K 8	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lithium in Water	170	NM	K 8.0	K 8	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	110	NM
Magnesium in Water	400000	NM	NM	NM	16.9	NM	NM	NM	··· NM	NM	NM	NM	NM	NM	NM	NM	NM	2	NM
Mercury - Dissolved	2 A	K 0.2 HT	K 0.2	K 0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Mercury in Water	2 A	NM	K 0.2	K 0.2	<0.2 HT	NM	NM	NM	NM .	K 0.2	NM	ND	NM						
Potassium in Water	NA	NM	NM	NM	3.8	4.9	1.3	1	ī.1	1.2	NM	1.2	10	1.6	1	1	1	69 D	NM
Selenium by Furnace	50 A	NM	NM	NM	<1.0	NM	NM	NM	NM	i nm i	NM	ND	NM						
Sodium in Water	125000	NM	NM	NM	16.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	37.1	NM
Aluminum - Dissolved	50 V	K 50	K 50	K 50	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Aluminum - Total	50 V	NM	K 50	110	<50	75	1410 DL	74		K 50	NM	K 50	ND	ND	ND	ND	ND	ND	ND
Antimony - Total	6 A	NM	NM	NM	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Arsenic - Dissolved	50 A	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Arsenic - Total	50 A	NM	K 1.0	K 1.0	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Barium - Dissolved	2000 A	19	17	21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Barium - Total	2000 A	NM	19	23	13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Berylium - Dissolved	4 A	K 1	K 1	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Berylium - Total	4 A	NM	K 1	K 1.0	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cadmium - Dissolved	5 A	K 0.2	K 0.2	K 0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cadmium Total	5 A	NM	0.9	K 0.2	<0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1.2	NM
Cobalt - Dissolved	40	K 15	K 15	K 15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cobalt - Total	40	NM	K 15	K 15	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Copper - Dissolved	1000 E	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Copper - Total	1000 E	NM	1.2	K 1.0	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Lead - Dissolved	4 L	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lead - Total	4 L	NM	46	K 1.0	2.7	28	293	15	78	3.6	NM	K 1.0	1.4	1.4	1.9	1.8	ND	4.1	ND
Manganese - Dissolved	50 E	K 50	K 5.0	K 5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Manganese - Total	50 E	NM	K 5.0	5	<5.0	7.5	118	<5.0	42	K 5.0	NM	K 5.0	9.2	9.3	ND	ND	ND	ND	ND
Molybdenum - Dissolved	37	K 25	K 25	K 25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Molybdenum - Total	37	NM	K 25	K 25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Nickel - Dissolved	100 A	K 2.0	K 2.0	K 2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Nickel - Total	100 A	NM	K 2.0	K 2.0	2.6	11	176	8.5	61	5.2	NM	2.7	2.2	ND	3.9	3.2	2.8	ND	NM
Silver - Total	34	NM	NM	NM	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Strontium - Dissolved	4600	52	50	67	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Strontium - Total	4600	NM	64	71	NM	NM	NM	NM	NM	NM	MM	NM	NM	NM	NM	NM	NM	27	NM
Thallium - Total	2 A	NM	NM	NM	<2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Titanium - Dissolved	NA	K 10	K 10	K 10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Titanium - Total	NA .	NM	K 10	K 10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Vanadium - Dissolved	4.5			K 10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Vanadium - Total	4.5			K 10	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Zinc - Dissolved	2400	125			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Zinc - Total	2400	NM	12600	1677	1110 DL	15700 DL	57000 DL	4190 DL	17600 DL	1200 DL	_ NM	289	1100 D	720	970	950	230	1300 D	330
Volatile Organic Compour	nds							-											
2-Butanone (MEK)	13000	ND	ND			ND	25		_	12 J	17 J	6.8 J	3600 J	18 J	ND	ND	ND	1900	ND
Tetrahydrofuran	95	NM	NM	-		NM	25			9.3			2500	8.1	ND	ND	ND	570	<b>4</b> • · · · · · · · · · · · · · · · · · ·
Tetrachioroethene	5 A			52	170	63	30	17	8.4		8.9	L	ND I	ND	1.6		ND =	<del></del>	ND
Trichloroethylene	5 A		ND	52	1.9			''	0,7	, <del></del>	5.5		5.7	ND	ND	ND	ND =-	ND	ND —
Benzene		- 140	יאט		1.3	ND	<u> </u>						3.5	ND	ND	ND	ND	2.2	
Acetone	<del> </del>		<del> </del>	-	+	ND	<u> </u>						68	ND	ND	ND	ND	99	
	<del>  -</del>			İ	<del> </del>	IND	<del> </del>	-		i i			00	!!	٠,٠	140	110	1 33	
Base Neutrals					+							-						-	
							<del> </del>		— - — -									+ · · · !	
bis(2-ethylhexyl)phthalate	6 A	NM	NM		4.4	3							NM	NM	NM	NM	NM	NM	NM

MW 4D											
<b>!</b>	Action		<b>Dates San</b>	npled			·	<u> </u>			
Inorganics	Level (1)		10/01/97	04/01/98	11/01/98	05/14/99	10/01/00	05/02/02	09/06/02	10/21/03	4/5-6/06
Boron - Dissolved	500	F	28	33	25	38	NM	NM	NM	NM	NM
Boron in Water	500	F	NM	34	29	38	37	35	28	37	NM
Calcium in Water	NA		NM	NM	NM	NM	74.1	NM	NM	NM	NM
Chromium - Dissolved	100	Α	2.1	K 1.0		K 1.0	NM	NM	NM	NM	NM
Chromium by Furnace	100	-	NM	1.4		K 1.0	2.8	K 1.0	1.3	4.7	2.6
Iron Dissolved			K 20	K 20	K 20	K 20	800	L	NM	NM	NM
Iron in Water	300	_	NM	K 20		K 20	<10	57	88	1600	67
Lithium - Dissolved	170		K 8.0	K 8.0	K 8	K 8	NM -	NM	NM	NM	NM
Lithium in Water	170		NM	K 8.0	K 8	K 8	25		NM	NM	NM
Mercury - Dissolved		Α	K 0.2 HT	K 0.2	K 0.2	K 0.2	NM	NM	NM	NM	NM
Mercury in Water		Α	NM	K 0.2	K 0.2	K 0.2	<0.2 HT	NM	K 0.2	NM	NM
Potassium in Water	NA		NM	NM	NM	NM	1.2		!	1.6	NM
Selenium by Furnace	50	Α	NM	NM	NM	NM	<1.0	NM	NM	NM	NM
Sodium in Water	125000		NM	NM	NM	NM	15.8		NM	NM	NM
Aluminum - Dissolved			K 50	K 50	K 50	K 50	NM	NM	NM	NM	NM
Aluminum - Total	50			K 50	K 50	K 50	708 DL	K 50	K 50	550	ND
Antimony - Total		A	NM	NM	NM	NM	<1.0	NM	NM	NM	NM
Arsenic - Dissolved			K 1.0	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM
Arsenic - Total	50		NM	K 1.0	K 1.0	K 1.0	1.6		NM	NM	ND
Barium - Dissolved	2000		21	30		26		NM	NM	NM	NM
Barium - Total	2000	_	NM	30					NM	NM	NM
Berylium - Dissolved			K 1	K 1	K 1.0	K 1.0	NM	NM	NM	NM	NM
Berylium - Total		Α		K 1	K 1.0	K 1.0	<1.0	NM	NM	NM	NM
Cadmium - Dissolved			K 0.2	K 0.2	K 0.2	K 0.2	NM	NM	NM	NM	NM
Cadmium Total		Α		K 0.2	K 0.2	K 0.2	2.3		NM	NM	NM
Cobalt - Dissolved	40	_	K 15	K 15	K 15	K 15	NM	NM	NM	NM	NM
Cobalt - Total	40		NM	K 15	K 15	K 15	<15	NM	NM	NM	NM
Copper - Dissolved			K 1.0		K 1.0	K 1.0	NM	NM	NM	NM	NM
Copper - Total	1000		NM		K 1.0	K 1.0	5.6		NM	NM	NM
Lead - Dissolved			K 1.0	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM
Lead - Total	4	<u> </u>	NM		K 1.0	2.5		K 1.0	4.4	93	3.5
Manganese - Dissolved	50	E	K 5.0	K 5.0	K 5	K 5	NM	K 5	NM	NM	NM
Manganese - Total	50		NM	K 5.0	K 5	K 5	23	)	K 5.0	21	ND
Molybdenum - Dissolved	37	-		K 25	K 25	K 25	NM	NM	NM	NM	NM
Molybdenum - Total	37		NM	K 25	K 25	K 25	<25	NM	NM	NM	NM
Nickel - Dissolved		Α	K 2.0	K 2.0	K 2.0	K 2.0	NM	NM	NM	NM	NM
Nickel - Total	100	<b>∔</b> ·-	NM	K 2.0	K 2.0	K 2.0		K 2.0	2.8	7.2	ND
Silver - Total	34		NM	NM	NM	NM	<0.5	NM	NM	NM	NM
Strontium - Dissolved	4600		52	69				NM	NM	NM	NM
Strontium - Total	4600		NM	70					NM	NM	NM
Thallium - Total		Α	NM	NM	NM	NM	<2.0	NM	NM	NM	NM
Titanium - Dissolved	NA		K 10	K 10	K 10	K 10	NM	NM	NM	NM	NM
Titanium - Total	NA		NM	K 10	K 10	K 10	90		NM	NM	NM
Vanadium - Dissolved	4.5	Γ-	K 10	K 10	K 10	K 10	NM	NM	NM	NM	NM
Vanadium - Total	4.5		NM	K 10	K 10	K 10	<10	NM	NM	NM	NM
Zinc - Dissolved	2400		65			:	1	NM	NM	NM	NM
Zinc - Total	2400	h	NM	1500	4		21500 DL		1680 DL	44000 D	2300 D
Volatile Organic Compo	unds	-					-				
Triable se athul		_	N.D.	ND.				3.7	-	ND	2.
Trichloroethylene		Α	ND	ND	3		40			1	49
Tetrachloroethene	5	Α	3.1	6.1	<u> </u>	6.2	13	4.3	38	01	49

MW-7S	s in ug/i			
Inorganics	Action		i	
Inorganics	Level (1)		C	ct-00
Boron in Water	500	F	<20	
Calcium in Water	NA			39.7
Chromium by Furnace	100	Α		1.8
Iron in Water	300	Ε	•	530
Iron in Water	300		<10	
Lithium in Water	170		Ī	15.6
Mercury in Water	2	Α	<0.2	HT
Potassium in Water	NA			0.4
Selenium by Furnace	50	Α	<1.0	
Sodium in Water	125000		<1.0	
Aluminum - Total	50	٧	908 [	)L
Antimony - Total	6	Α	<1.0	
Arsenic - Total	50	Α	<1.0	
Barium - Total	2000	Α	ļ	13
Berylium - Total	4		<1.0	
Cadmium Total	5	Α	<0.2	
Cobalt - Total	40		<15	
Copper - Total	1000	Ε	<1.0	
Lead - Total	4	L	<1.0	
Manganese - Total	50	Ε		12
Molybdenum - Total	37		<25	
Nickel - Total	100	Α		4.1
Silver - Total	34		<0.5	
Strontium - Total	4600			25
Thallium - Total	2	Α	<2.0	
Titanium - Total	NA	1		69
Vanadium - Total	4.5		<10	
Zinc - Total	2400		†	32
Volatile Organic Comp	ounds - Al	<u> I N</u>	שו	

MW-8S				ts in ug/l	<del></del>			
MIVV-03	Action		Dates Sa-		<del> </del>			
inorganics	Level (1)		Dates Sarr 10/01/97		11/01/98	05/14/99	10/01/00	00/00/04
	Lever(1)		10/01/97	04/01/98	11/01/90	05/14/99	10/01/00	08/08/01
Boron - Dissolved	500	F	NM	22	22	K 20	NM	NM
Boron in Water	500		27	23		K 20	<20	- NM
Calcium in Water	NA NA		NM -	NM	NM 20	NM	42	NM
Chromium - Dissolved	100	Δ	NM	1.8		K 1.0	NM TE	NM
Chromium by Furnace	100		29	2.6		<del></del>	1.3	NM
Iron Dissolved	300			K 20	1670	<u> </u>	540	NM
Iron in Water	300		1000					NM
Lithium - Dissolved	170		r ***.	K 8.0	K 8	K 8	NM	NM
Lithium in Water	170			K 8.0	K 8	15	12.8	NM
Mercury - Dissolved		Α		K 0.2	K 0.2	K 0.2	12.0	NM
Mercury in Water		A		K 0.2	K 0.2	K 0.2	<0.2 HT	NM
Potassium in Water	NA -	<del></del> -	NM	NM	NM	NM	0.8	NM
Selenium by Furnace	50	Α	NM	NM	NM	NM	<1.0	NM
Sodium in Water	125000		NM	NM	NM	NM -	3.2	NM
Aluminum - Dissolved	50	V		K 50	1600		NM	NM
Aluminum - Total		V	1500			9500 DL	898 DL	NM
Antimony - Total		A	NM	NM	NM	NM	<1.0	NM
Arsenic - Dissolved	50			K 1.0	K 1.0	K 1.0	NM	NM
Arsenic - Total	50			K 1.0	K 1.0		<1.0	NM
Barium - Dissolved	2000		NM	6	<del></del>	7	NM	NM
Barium - Total	2000		69	16			14	NM
Berylium - Dissolved	4		NM	K 1	K 1.0	K 1.0	NM	NM
Berylium - Total	4		K 1	K 1	K 1.0	K 1.0	<1.0	NM
Cadmium - Dissolved		A	NM	K 0.2	K 0.2	K 0.2	NM	NM
Cadmium Total		A	K 0.2	K 0.2	K 0.2		<0.2	NM
Cobalt - Dissolved	40		NM	K 15	K 15	K 15	NM	NM
Cobalt - Total	40		K 15	K 15	K 15	K 15	<15	NM
Copper - Dissolved	1000	F	NM	K 1.0		K 1.0	NM	NM
Copper - Total	1000			K 1.0	K 1.0		<1.0	NM
Lead - Dissolved	4		NM	K 1.0		K 1.0	NM	NM
Lead - Total	4		K 1.0	K 1.0	K 1.0	.1	<1.0	NM
Manganese - Dissolved	50		NM	K 5.0	」N 1.0 106		r	NM
Manganese - Total	50		64	47				NM
Molybdenum - Dissolved	37	_	NM	K 25	K 25	K 25	NM ZO	NM
Molybdenum - Total	37		K 25	K 25	K 25	K 25	<25	NM
Nickel - Dissolved	100	Δ	NM	K 2.0		K 2.0	NM	NM
Nickel - Total	100		K 2.0	K 2.0	K 2.0	10		NM
Silver - Total	34	<u> </u>	NM	NM	NM	NM	<0.5	NM
Strontium - Dissolved	4600		NM	29		33		NM
Strontium - Total	4600	-	34	33			36	NM
Thallium - Total		Α	NM	NM	NM	NM .	<2.0	NM
Titanium - Dissolved	NA -	<u> </u>	NM	K 10		K 10	NM	NM
Titanium - Total	NA NA		36	24	+		<71	NM
Vanadium - Dissolved	4.5		NM	K 10	K 10	K 10	NM	NM
Vanadium - Total	4.5	<del> </del>	K 10	K 10	K 10		<10	NM
Zinc - Dissolved	2400	)	NM —	20		1		NM
Zinc - Dissolved Zinc - Total	2400		56	40			24	NM
	2400	i			72	207		
Volatile Organic Compou	ınds						;	
		ļ				ļ - —		
Chloroform	100	A,W	ND	ND	1.4			ND

MW-8D	A -/:	$\vdash$	5 4 5	L	_			ļ	
Inorganics	Action	<u> </u>	Dates San			44/04/00		10/04/00	00/07/0
<del></del>	Level (1)		10/01/97	04/01/9	98_	11/01/98	05/14/99	10/01/00	08/07/0
Boron - Dissolved	500	F	NM		22	K 20	K 20	NM	_ NM
Boron in Water	500	_	27		25		K 20	24	NM
Calcium in Water	NA		NM	NM	=	NM	NM	33.2	NM
Chromium - Dissolved	100	Α	NM		1.5		K 1.0	NM	NM
Chromium by Furnace	100		3.4		1.7	1.3	1.1	1.4	NM
ron Dissolved	300		NM	K 20		K 20	K 20	510	NM
Iron in Water	300		70		50			<10	NM
Lithium - Dissolved	170	-	NM	K 8.0	-	K 8	K 8	NM	NM
Lithium in Water	170		K 8.0	K 8.0		K 8	K 8	10.9	NM
Mercury - Dissolved		Α	NM	K 0.2		K 0.2	K 0.2	NM	NM
Mercury in Water		_	K 0.2 HT	K 0.2		K 0.2	K 0.2	<0.2 HT	NM
Potassium in Water	NA	-	NM	NM		NM	NM	0.5	NM
Selenium by Furnace	50	Α	NM	NM		NM	NM	<1.0	NM
Sodium in Water	125000		NM	NM	i	NM	NM	2.6	NM
Aluminum - Dissolved	50	٧	NM	K 50		K 50	K 50	NM	NM
Aluminum - Total	50	٧	K 50	K 50		K 50		530 DL	NM
Antimony - Total	6	À	NM	NM		NM	NM	<1.0	NM
Arsenic - Dissolved	50	Α	NM	K 1.0		K 1.0	K 1.0	NM	NM
Arsenic - Total	50	Α	K 1.0	K 1.0		K 1.0	K 1.0	1.5	NM
Barium - Dissolved	2000		NM		9	9	8	NM	NM
Barium - Total	2000	Α	9	_	9	9	9	12	NM
Berylium - Dissolved	4	Α	NM	K 1		K 1.0	K 1.0	NM	NM
Berylium - Total	4	Α	K 1	K 1		K 1.0	K 1.0	<1.0	NM
Cadmium - Dissolved		Α	NM	K 0.2		K 0.2	K 0.2	NM	NM
Cadmium Total		Α	0.8	(	0.5	K 0.2	0.2	2	NM
Cobalt - Dissolved	40		NM	K 15		K 15	K 15	NM	NM
Cobalt - Total	40		K 15	K 15		K 15	K 15	<15	NM
Copper - Dissolved	1000	1	NM	K 1.0		K 1.0	K 1.0	NM	NM
Copper - Total	1000	E		K 1.0		K 1.0	2.1	4.2	NM
Lead - Dissolved			NM	K 1.0		K 1.0	K 1.0	NM	NM
Lead - Total		L	22		24	K 1.0	18		NM
Manganese - Dissolved	50		NM	K 5.0		K 5	K 5	NM	NM
Manganese - Total		Ε	K 5.0	K 5.0		K 5	7	16	NM
Molybdenum - Dissolved	37		NM	K 25		K 25	K 25	NM	NM
Molybdenum - Total	37		K 25	K 25		K 25	K 25	<25	NM
Nickel - Dissolved	100		NM	K 2.0	_	K 2.0	K 2.0	NM	NM_
Nickel - Total			K 2.0	K 2.0		K 2.0	K 2.0	2.5	NM
Silver - Total	34	L	NM	NM		NM_	NM	<0.5	NM
Strontium - Dissolved	4600		NM		39	42	49	NM	NM
Strontium - Total	4600		39		39		42	39	NM
Thallium - Total		Α	NM	NM		NM	NM	<2.0	NM
Titanium - Dissolved	NA		NM	K 10		K 10	K 10	NM	NM
Titanium - Total	NA	ļ_	K 10	K 10		K 10	K 10	<50 DM	NM
Vanadium - Dissolved	4.5		NM	K 10		K 10	K 10	NM	NM
Vanadium - Total	4.5	_	K 10	K 10		K 10	K 10	<10	NM
Zinc - Dissolved	2400		NM		72	47	197	NM OFFICE DI	<u>NM</u>
Zinc - Total	2400	-	<b>7300</b>	62 	200	1560	<b>5400</b>	25500 DL	NM
Volatile Organic Compo	unds	ļ 							
1,2,4-Trimethylbenzene	63	_	ND	ND			1.1		ND

Table represents reported concentrations ND - Non-Detect

Highlighted values exceed applicable criteria

NM - Not Measured

MW-101D																		
Inorganics	Action Level (1)	10/01/97	· · · · · · · · · · · · · · · · · · ·	11/01/98	11/01/98	10/01/00	02/27/02	05/02/02	05/02/02	09/26/02		03/27/03	06/19/03	10/21/03	10/21/03	8/23-24/04	3/29-30/05	4/5-6/06
Boron - Dissolved	500 F	32	28	29	25	NM	NM	NM	- NM	NM	NM	NM	NM	-NM	NM	- ŅŌ	NM	NM
Boron in Water	500 F		30			44	28	44	42	NM	29	ND	34	ND	ND	NM	31	
Calcium in Water	NA NA	NM	NM	NM	NM	21.1	NM	NM	NM .	NM	NM	NM -	NM	NM	NM	NM	21.6	
Chromium - Dissolved	100 A	· · · · · · · · · · · · · · · · · · ·	K 1.0		K 1.0	NM	NM	NM	NM	NM	NM -	NM	NM	NM	NM -	NM	NM	ND
Chromium by Furnace	100 A	-+	K 1.0	1.7			<1.0	1.2		NM	K 1.0	ND	ND	ND	ND I	69		NM
Iron Dissolved	300 E			+	· ·	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM ···	NM S	NM	NM
Iron in Water	300 E		120			310		300	260	NM	43	46	23	31	31	430		
Lithium - Dissolved	170	K 8.0	K 8.0	<del></del>	K8	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM NM	NM
Lithium in Water	170		K 8.0	K 8		<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	11	-+
Magnesium in Water	400000	NM	NM	NM	NM	12.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	9.9	
Mercury - Dissolved	2 A	K 0.2 HT	K 0.2	K 0.2	K 0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Mercury in Water	2 A		K 0.2	K 0.2	K 0.2	<0.2 HT	NM	NM	NM	NM	NM	NM	MM	NM	NM	NM	ND	NM
Potassium in Water	NA	NM	NM	NM	NM	28	13.9	8.4	8.2	NM	31.2	38	18.4	36.1 D	36.7	42.5 D	13.8 D	NM
Selenium by Furnace	50 A	NM	NM	NM	NM	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Sodium in Water	125000	NM	NM	NM	NM	11.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	7	NM
Aluminum - Dissolved		/ K 50	K 50	1	K 50	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Aluminum - Total	50 V		K 50	100		418	125	78	63	NM	K 50	ND	ND	ND	ND	ND	120	
Antimony - Total	6 A		NM	NM		<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Arsenic - Dissolved	50 A			K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Arsenic - Total	50 A		2.8			3.5		NM	NM	NM	NM	NM	NM	NM	NM	NM	1.7	
Barium - Dissolved	2000 A					NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Barium - Total	2000 A		37	4 - · · · · · · · · · · · · · · · · · ·	4 +	35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	27	
Berylium - Dissolved		K 1	K 1	K 1.0	K 1.0	NM <1.0	NM NM	NM NIM	NM NM	NM _	NM	NM	NM	NM	NM_	NM NM	NM ND	NM NM
Berylium - Total Cadmium - Dissolved	4 A 5 A		K 1	K 1.0 K 0.2	K 1.0 K 0.2	<1.0 NM	NM NM	NM NM	NM NM	NM NM	NM NM	NM NM	NM_NM	NM NM	NM NM	NM	NM	NM NM
Cadmium Total	5 A		K 0.2 K 0.2	K 0.2	<del> </del>	<0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cobalt - Dissolved	40	K 15	K 15	K 15	K 15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM -
Cobalt - Total	40	NM	K 15	K 15	1	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Copper - Dissolved	1000 E		K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Copper - Total	1000 E		K 1.0	K 1.0	K 1.0	5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	2.6	
Lead - Dissolved		K 1.0	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lead - Total	4 L			K 1.0	K 1.0	4	2		3.2	NM	K 1.0	ND	ND	1.1	1	1.1	ND	ND
Manganese - Dissolved	50 E		<del></del>	4	13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Manganese - Total	50 E		11	14	+	8.3		11	11	NM	K 5.0	ND	ND	ND	ND	12	5.2	2 ND
Molybdenum - Dissolved	37	K 25	K 25	K 25	K 25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Molybdenum - Total	37	NM	K 25	K 25		<25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Nickel - Dissolved	100 A	K 2.0	K 2.0	K 2.0	K 2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Nickel - Total	100 A	NM A	K 2.0	K 2.0	K 2.0		<2.0	2.5	K 2.0	NM	K 2.0	ND	ND	ND	ND	11	4	ND
Silver - Total	34	NM	NM	NM	NM	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Strontium - Dissolved	4600	440				NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Strontium - Total	4600	NM	450			416 DL	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	400	<del></del>
Thallium - Total	2 4		NM	NM V 10		<2.0	NM	NM	NM	NM	NM NM	NM	NM	NM	NM	NM	ND	NM
Titanium - Dissolved	NA NA	K 10	K 10	K 10	K 10	NM 24	NM	NM	NM	NM	NM .	NM	NM	NM	NM	NM.	NM	NM NM
Titanium - Total	NA 4.5	NM V 10	K 10	K 10	K 10	31		NM	NM	NM	NM	NM NM	NM	NM	NM NM	NM NM	ND NM	NM NM
Vanadium - Dissolved Vanadium - Total	4.5	K 10 NM	K 10	K 10 K 10	K 10	NM <10	NM NM	NM NM	NM NM	NM_ NM	NM NM	NM NM	NM NM	NM NM	NM	NM NM	ND	NM
Zinc - Dissolved	4.5 2400	ININ	7 45				NM NM	NM NM	NM NM	NM	NM	NM	NM -	NM	NM INM	NM	NM -	NM
Zinc - Total	2400	NM '	4330	L		18700 DL		31100 DL		NM						4800 D	11000 D	
Lino - Total	2400	INIVI		712	13/3	10100 DE	, c	01400 DC	_3000 DL		3000 DE			2000 D	12000	1000		
Volatile Organic Compour	nds													··· ·				
Trichloroethylene	5 4	A 100	) <sup>'</sup> 84	97	100	44	73	47 DL	51	69	39	21	38	28	24	30	72	5 ND
Tetrachloroethene		1200 DL		890 DL	920 DL	220		240 DL	270				80	57	48	- 50		
trans-1,2-Dichloroethylene	100 /		ND				100				2.3				2.4		ND	ND
2-Butanone	13000	1	160							-		ND	ND	ND	ND	ND	ND	ND
Benzene			1				<del> </del>	-			+	1.1	ND	ND	ND	ND	ND	ND
m & p - Xylene		1							Ī		1		2.2		ND	ND	ND _	ND
Toluene							ļ		<u> </u>		1	·	3.3		ND	ND	ND	ND
	-	1	-	·	<del>-</del>		·			· · · · · · · · · · · · · · · · · · ·								

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MW 101S		T		T				· · · ·		<del></del>										
MITT 1013	Action	Dates San	noled	<del>                                     </del>			<del> </del>	-	<del></del> -			<u> </u>					——·- —			
Inorganics	_	<del></del>					i		<u> </u>	المنصر والمارية		. <u> </u>			<u> </u>			- :- · · · · · · ·		
	Level (1)	10/01/97	10/01/97	04/01/98	04/01/98	11/01/98	05/14/99	05/14/99	10/01/00	10/01/00	02/26/02	05/02/02	09/06/02	12/05/02	03/27/03	06/19/03	10/21/03	8/23-24/04	3/29-30/05	4/5-6/06
	!		1	ļ	ļ		!	!				!		ļ		ļ		i		- 1
Boron - Dissolved	500 F	49	50	NM	NM	50	54	53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Boron in Water	500 F	NM	NM	55	60	55	55	55		55	52	50	54	58	66	60	65i	66	59	NM
Calcium in Water	NA	NM	NM	NM	NM	NM	NM	NM	55.1	55.2	NM	NM	NM	NM	NM	NM	NM	NM	41.3	NM
Chromium - Dissolved		K 1.0	K 1.0	NM		K 1.0		K 1.0	NM	NM NM	NM	NM	NM	NM	NM		NM ·	- NM		
					<del> </del>			·	<del></del>	i +						NM			NM	NM
Chromium by Furnace	100 A	NM	NM	2.7		K 1.0	1.4	1.2		÷-			K 1.0	K 1.0	ND	ND	ND	1.8	2.1	ND
Iron Dissolved	300 E		K 20	NM NM	4	K 20	K 20	K 20	NM.	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Iron in Water	300 E	NM	NM	1500	1680	730			1800	1600	44	360	30	70	ND	ND	ND	750	120	32
Lithium - Dissolved	170	K 8.0	K 8.0	NM	NM	K 8	K 8	K 8	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lithium in Water	170	NM	NM	K 8.0	K 8.0	K 8	K 8	K 8	<10	<10	NM	NM	NM	NM	NM	NM	MM	NM	ND	NM
Magnesium in Water	400000	NM	NM	NM	NM	NM	NM	NM	19.4	19.3	NM	NM	NM	NM	NM	NM	NM	NM	15.8	NM
Mercury - Dissolved		K 0.2 HT	K 0.2 HT	NM	NM	K 0.2	K 0.2	K 0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	2 A	<del></del>	NM	K 0.2	K 0.2	K 0.2	K 0.2	K 0.2	<0.2 HT	<0.2 HT	NM	NM		NM	NM	NM	NM	NM	ND	NM
Mercury in Water		<del></del>		+		<del></del>							K 0.2							
Potassium in Water	NA _	NM	NM	NM	NM	NM	NM	NM	3.1	3.1	2.7	2.6	2.9		3	2.7	2.7	3.2	3.1	NM
Selenium by Furnace	50 A		NM	NM	NM	NM	NM	NM	<1.0	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	1.8	NM_
Sodium in Water	125000	NM	NM	NM	NM	NM	NM_	NM	31.7	30.6	NM _	NM	NM	NM	NM	NM	NM	NM	12.8	NM
Aluminum - Dissolved	50 V	K 50	K 50	NM	NM	K 50	K 50	K 50	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Aluminum - Total	50 V	NM	NM	990	1600	640	490	350	2920 DL	2380 DL	NM	358	K 50	69	ND	ND	ND -	810 <sup>1</sup>	110	ND
Antimony - Total	6 A	NM	NM	NM	NM	NM	NM	NM	<1.0	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Arsenic - Dissolved	50 A	K 1.0	K 1.0	K 1.0		K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Arsenic - Total	50 A		NM	NM	K 1.0	K 1.0	K 1.0	K 1.0		<1.0	NM	NM	NM	NM	NM	NM	- <u>NM</u> -	NM	ND	ND
Barium - Dissolved	2000 A		+	+	NM	29	-			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
and the second of the second o			+							4										
Barium - Total	2000 A	+	NM	38	<del></del>				<del></del> -	L	NM	NM	NM	NM	NM	NM	NM	NM	34	NM
Berylium - Dissolved	+	K 1	K 1	NM	NM	K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Berylium - Total	4 A	NM	NM	K 1	K 1	K 1.0	K 1.0	K 1.0	<1.0	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cadmium - Dissolved	5 A	K 0.2	K 0.2	NM	NM	K 0.2	K 0.2	K 0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cadmium Total	5 A	NM	NM	K 0.2	K 0.2	K 0.2	K 0.2	K 0.2	0.3	<0.2	NM	NM	NM	NM	NM	NM	NM	NM	0.68	NM
Cobalt - Dissolved	40	K 15	K 15	NM	NM	K 15	K 15	K 15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cobalt - Total	40	NM	NM	K 15	K 15	K 15	K 15	K 15	<15	<15	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Copper - Dissolved	1000 E	_	K 1.0	NM		K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	+		NM	2.6		K 1.0	1.0	+	+	2.6	NM	NM -	NM	NM	NM	NM	NM	NM		NM
Copper - Total	1000 E	+	<b>+</b>				<b></b>								-				2.6	
Lead - Dissolved	4 L	K 1.0	K 1.0	NM		K 1.0	K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lead - Total	4 L	NM	NM	1.8	+	K 1.0	K 1.0	K 1.0	2.9			K 1.0	K 1.0	K 1.0	ND	ND	ND	ND	ND	ND
Manganese - Dissolved	50 E		7.1	NM	NM	12			NM	NM	NM	NM	NM	NM_	NM	NM	NM	NM	NM	NM
Manganese - Total	50 E	NM	NM	41	52	25	20	23	46	39	<5.0	10	K 5.0	6.1	6.4	ND	ND	24	12	9.5
Molybdenum - Dissolved	37	K 25	K 25	NM	NM	K 25	K 25	K 25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Molybdenum - Total	37	NM	NM	K 25	K 25	K 25	K 25	K 25	<25	<25	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Nickel - Dissolved	100 A	+	NM	NM	NM	K 2.0	K 2.0	K 2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Nickel - Total	+	K 2.0	K 2.0	K 2.0	L	K 2.0	2.3		4.8	+- 1	2.7	3.6	3.1	2.5	2.6	2.6	4.5	3.8	2.6	2
	<del></del>		+ · ·	NM		<b>←</b> ·	· · · · · ·			1			·		NM Z.0			NM		NM
Silver - Total	34	NM	NM		NM	NM	NM 04	NM	<.5	<0.5	NM	NM	NM	NM		NM -	NM		ND	
Strontium - Dissolved	4600	37	<del></del>		NM	56				NM_	NM	NM	NM	NM	NM	NM	NM .	NM	NM	NM
Strontium - Total	4600	NM	NM	62	+	-	60				NM	NM	NM	NM	NM	NM	NM	NM_	53	NM
Thallium - Total	2A	NM	NM	NM	NM	NM	NM	NM	<2.0	<2.0	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Titanium - Dissolved	NA	K 10	K 10	NM	NM	K 10	K 10	K 10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Titanium - Total	NA	NM	NM	22	NM	20	12	K 10	176 DL	143 DL	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Vanadium - Dissolved	4.5	K 10	K 10	1				K 10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Vanadium - Total	4.5	NM		K 10		K 10		K 10	<10	<10	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Zinc - Dissolved	2400	1620			NM	738				NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Zinc - Total	2400	NM	NM	12900						6520 DL	891	1		1510 DL	670	830		1800 D	34000	870
Zilic - Total	2400	INIVI	14101	Į Į	Ιούσο		<b>~</b> ∡10	2109	· Enion hr	OUEU DE	031	010	143	1910 DL	0,0	0.00			- <del> </del>	010
V-1-411- OI- O	<u> </u>			ļ		1		<del> </del>				l			<del>                                     </del>				—	ļ
Voiatile Organic Compo	unas											ļ · · ·			ļ					
	<u> </u>	]			1	1		ŀ								Į				
Tetrachloroethene	5 A	3300 DL	3000	6800 DL	7400	11000 DL	18000	19000	9 <b>50</b> 0	23000	33000	36000 DL	35000	18000	14000	13000	8600	16000	23000	14000
cis-1,2-Dichloroethene	70 A	NM	NM	1.1	ND	1.2	1	0.90 T						1	ND	ND	ND	ND	ND	ND
Trichloroethene		6.3			ND	27	33							1	ND	9.5	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane			ND		ND	4.7		T .		1 1				Ì	ND	2.1	ND	ND	ND	ND
1,2-Dichlorobenzene	600 A				ND	10 J	1.4	<del></del>	<del></del>	† į		† -		t	ND	1.3	ND	ND	ND	ND
2-Butanone	·	110	110	110	-		∤ - <b>'-</b>	ļ	+			}		1	1200 J	ND 1.5	ND	ND ND	ND ND	ND
	13000	+		1		ļ		<b>+</b>		ļ.					12003		the second of the second			ND
Toluene	t	- <del>i</del>	<del></del>	<del></del>	ļ		<u> </u>	<u> </u>		· i					<del> </del>	1.8	ND	ND	ND	ואט
L	J		<u> </u>	<u> </u>	ļ	<u> </u>	ļ	ļ .				ļ			ļ <del></del> ļ			L		 
Base Neutrals	1 J			<u> </u>						:		l		<u> </u>	NM	NM	NM	NM	NM	NM
L	1									1		i	İ	L	i[					
bis(2-ethylhexyl)phtalate	6 A	NM	NM	NM	NM						23	-					-			L
	<del></del>			,	<u> </u>	<del></del>		<del></del>												

MW-102S	Action	<del> </del> —	Dates San	holod			
Inorganics		-			44/04/00	05/44/00	10/01/0
	Level (1)	-	10/01/97	04/01/98	11/01/98	05/14/99	10/01/0
Boron - Dissolved	500	F	NM	K 20	K 20	K 20	NM
Boron in Water	500	F	26	K 20	K 20	K 20	NM
Calcium in Water	NA	-	NM	NM	NM	NM	65.
Chromium - Dissolved	100	Α	NM	K 1.0	1.1	1.1	NM
Chromium by Furnace	100			K 1.0	1.6		<1.0
Iron - Dissolved	300		NM	K 20	K 20	K 20	NM
Iron in Water	300			K 20	K 20	500	
Lithium - Dissolved	170		NM	K 8.0	K 8	K 8	NM
Lithium in Water	170	İ	K 8.0	K 8	K 8	K 8	NM
Magnesium in Water	400000		K 5.0	NM	NM	NM	18.
Mercury - Dissolved		Α	NM	K 0.2	K 0.2	K 0.2	NM
Mercury in Water			K 0.2 HT	K 0.2	K 0.2	K 0.2	<0.2 HT
Potassium in Water	NA -	· `	NM	NM	NM	NM	0.
Selenium by Furnace	50	Δ	NM	NM	NM	NM	<1.0
Sodium in Water	125000	_	NM		NM	NM	50.8
Aluminum - Dissolved	50	V	NM	K 50	K 50	K 50	NM
Aluminum - Total	50		K 50	K 50	K 50		<50
Antimony - Total		Ā	NM	NM	NM	NM	<1.0
Arsenic - Dissolved	50		NM	K 1.0	K 1.0	K 1.0	
Arsenic - Dissolved Arsenic - Total			K 1.0	K 1.0 K 1.0	K 1.0	K 1.0	NM <1.0
			NM			9	NM
Barium - Dissolved Barium - Total	2000			13		9	
	2000		13	13	12	L	11
Berylium - Dissolved		Α	NM	K 1	K 1.0	K 1.0	NM
Berylium - Total			K 1	K 1	K 1.0	K 1.0	<1.0
Cadmium - Dissolved		Α	NM	K 0.2	K 0.2	K 0.2	NM
Cadmium - Total			K 0.2	K 0.2	K 0.2	K 0.2	<0.2
Cobalt - Dissolved	40		NM	K 15	K 15	K 15	NM
Cobalt - Total	40	_	K 15	K 15	K 15	K 15	<15
Copper - Dissolved	1000		NM		K 1.0	K 1.0	NM
Copper - Total	1000		K 1.0	K 1.0	K 1.0	1.7	1.
Lead - Dissolved	4	L	NM	K 1.0	K 1.0	K 1.0	NM
Lead - Total		L	K 1.0	K 1.0	K 1.0		<1.0
Manganese - Dissolved	50		NM	K 5.0	K 5	K 5	NM
Manganese - Total	50	Ε	NM	K 5.0	K 5		<5.0
Molybdenum - Dissolved	37		NM	K 25	K 25	K 25	NM
Molybdenum - Total	37		K 25	K 25	K 25	K 25	NM
Nickel - Dissolved	100		NM	K 2.0	K 2.0	K 2.0	NM
Nickel - Total			K 2.0	K 2.0	K 2.0	2.8	3.4
Silver - Total	34		NM	NM	NM	NM	<0.5
Strontium - Dissolved	4600		NM	130	97	79	NM
Strontium - Total	4600		110	130	95	69	NM
Thallium - Total	2	Α	NM	NM	NM	NM	<2.0
Titanium - Dissolved	NA		NM	K 10	K 10	K 10	NM
Titanium - Total	NA		K 10	K 10	K 10	K 10	NM
Vanadium - Dissolved	4.5		NM	K 10	K 10	K 10	NM
Vanadium - Total	4.5	+	K 10	K 10	K 10	K 10	<10
Zinc - Dissolved	2400		NM	95	<del></del>		
	2400		54	104			1:
Zinc - Total							

MW-102D		<u>_</u>		l	L	ļ	
Inorganics	Action	<u>L</u>	Dates San				
	Level (1)		10/01/97	04/01/98	11/01/98	05/14/99	10/01/0
Boron - Dissolved	500	F	NM	80	80	75	NM
Boron in Water	500		100	80	84	75	
Calcium in Water	NA	-	NM	NM	NM	NM	5.3
Chromium - Dissolved	100	Α	NM	K 1.0	K 1.0	K 1.0	NM
Chromium by Furnace	100			K 1.0	K 1.0	K 1.0	<1.0
Iron - Dissolved	300		NM	240	248	248	NM
Iron in Water	300	-	395				<20
Lithium - Dissolved	170		NM	K 8.0	K8	K8	NM
Lithium in Water	170		K 8.0	K 8.0	K 8	K 8	NM
Magnesium in Water	400000		25	NM	NM -	NM	9.6
Mercury - Dissolved		Α	NM 23	K 0.2	K 0.2	K 0.2	NM
Mercury in Water			K 0.2 HT	K 0.2	K 0.2	K 0.2	<0.2 HT
Potassium in Water	NA Z	_	NM	NM	NM	NM	3.9
Selenium by Furnace	50	Δ	NM	NM	NM	NM	<1.0
Sodium in Water	125000		NM	NM	NM	NM	42.1
Aluminum - Dissolved	50	-	NM	K 50	K 50	K 50	NM
Aluminum - Total	50				K 50	K 50	<50
Antimony - Total		A	or solid deposition.	NM		NM	
Arsenic - Dissolved	50	1	NM NM	K 1.0	NM K 1 0		<1.0 NM
					K 1.0	K 1.0	
Arsenic - Total			K 1.0	K 1.0	K 1.0	K 1.0	<1.0
Barium - Dissolved	2000		NM 40	33	35	32	NM
Barium - Total	2000	-	40	35	36		<5.0
Berylium - Dissolved		Α	NM_	K 1	K 1.0	K 1.0	NM
Berylium - Total			K 1	K1	K 1.0	K 1.0	<1.0
Cadmium - Dissolved		Α	NM	K 0.2	K 0.2	K 0.2	NM
Cadmium Total		+	K 0.2	K 0.2	K 0.2	K 0.2	<0.2
Cobalt - Dissolved	40	ļ	NM	K 15	K 15	K 15	NM
Cobalt - Total	40	<u></u> .	K 15	K 15	K 15	K 15	<15
Copper - Dissolved	1000		NM	K 1.0	K 1.0	K 1.0	NM
Copper - Total	1000	l .		K 1.0	K 1.0	K 1.0	<1.0
Lead - Dissolved		L	NM	K 1.0	K 1.0	K 1.0	NM
Lead - Total	4		2.1		K 1.0	K 1.0	1.1
Manganese - Dissolved	50		NM	18	18	18	NM
Manganese - Total	50	E	NM	18	17		<5
Molybdenum - Dissolved	37	_	NM	K 25	K 25	K 25	NM
Molybdenum - Total	37		K 25	K 25	K 25	K 25	NM
Nickel - Dissolved	100			K 2.0	K 2.0	K 2.0	NM
Nickel - Total			K 2.0	K 2.0	K 2.0	K 2.0	<2.0
Silver - Total	34		NM	NM	NM	NM	<0.5
Strontium - Dissolved	4600		NM	710	760	790	NM
Strontium - Total	4600		820	750	790	790	NM
Thallium - Total	2	Α	NM	NM	NM	NM	<2.0
Titanium - Dissolved	NA		NM	K 10	K 10	K 10	NM
Titanium - Total	NA		K 10	K 10	K 10	K 10	NM
Vanadium - Dissolved	4.5		NM	K 10	K 10	K 10	NM
Vanadium - Total	4.5		K 10	K 10	K 10	K 10	<10
Zinc - Dissolved	2400	+	NM	173		317	NM
							3560 DL
Zinc - Total	2400	i	53000	6830	1100	450	3300 DE

MW 103		LŢ						l				
Inorganics	Action		Dates San									
morganics	Level (1)		10/01/97	04/01/98	11/01/98	10/01/00	10/01/00	02/25/02	05/02/02	09/06/02	10/21/03	4/5-6/06
Boron - Dissolved	500	F	740	· ⊪ ∶ 830	800	NM	NM	NM	NM	NM	NM	NM
Boron in Water	500		 NM	847	820		NM	640	80	23	400	NM
Calcium in Water	NA		NM	NM	NM	2.4	2.2		NM	NM 20	NM	NM
Chromium - Dissolved	100	Δ			K 1.0	NM Z.T	NM	NM	NM	NM	NM	NM
Chromium by Furnace	100		NM	2.6		<1.0	<1.0	<1.0	44	3.4	ND	ND
ron - Dissolved	300		70	57	50		NM	NM	NM	3.4 NM	NM	
ron in Water	300		NM	900		NM	<20	1	13000	950		MM
					1200			26			ND ND	ND
ithium - Dissolved	170	İ			K 8	NM	NM	NM	NM	NM_	NM	NM
ithium in Water	170	ii			K 8	NM	NM	NM	NM	NM	NM_	NM_
Magnesium in Water	400000	I. i	NM	NM	NM	4.6	4.7		NM	NM	NM	NM
Mercury - Dissolved					K 0.2	NM	NM	NM	NM	NM	NM	NM_
Mercury in Water	2	Α			K 0.2	<0.2 HT	<0.2 HT	NM	NM	K 0.2	NM	NM
Potassium in Water	NA		NM	NM	NM	3	2.9		1.6	0.7	3.4	NM
Selenium by Furnace	<b>50</b> i	Α	NM	NM	NM	<1.0	<1.0	NM	NM	NM	NM .	NM
Sodium in Water	125000	Ļļ	NM	NM	NM _	44.1	43.3		NM	NM	NM	NM
Aluminum - Dissolved				K 50	K 50	NM	NM	NM	NM	NM	NM	NM
Aluminum - Total	50			800	. ^ - × 2 xxxxxx 20° 22° - 22°		<50	NM		1060 DL	ND	ND
Antimony - Total	6		NM	NM	NM	<1.0	<1.0	NM	NM	NM	NM	NM
Arsenic - Dissolved	1	1 - 1	K 1.0		K 1.0	NM	NM	NM	NM	NM	NM	NM
Arsenic - Total	50			K 1.0	K 1.0	<1.0	<1.0	NM	NM	NM	NM	ND
Barium - Dissolved	2000	_	36	43	42	NM	NM	NM	NM	NM	NM	NM
Barium - Total	2000		NM	50	52	<5	<5.0	NM	NM	NM	NM	NM
Berylium - Dissolved	4	Α	K 1	K 1	K 1.0	NM	NM	NM	NM	NM	NM	NM
Berylium - Total	4	Α	NM	K 1	K 1.0	<1.0	<1.0	NM	NM	NM	NM	NM
Cadmium - Dissolved	5	Α	K 0.2		K 0.2	NM	NM	NM	NM	NM	NM	NM
Cadmium Total		Α		K 0.2	K 0.2	<0.2	<0.2	NM	NM	NM	NM	NM
Cobalt - Dissolved	40			K 15	K 15	NM	NM	NM	NM	NM	NM	NM
Cobalt - Total	40		NM	K 15	K 15	<15	<15	NM	NM	NM	NM	NM
Copper - Dissolved	1000	E		K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM
Copper - Total	1000		NM		K 1.0		<1.0	NM	NM	NM	NM	NM
_ead - Dissolved		_		K 1.0	K 1.0	NM	NM	NM	NM	NM	NM	NM
Lead - Total	4	-			K 1.0	<1.0	<1.0	<1.0	18	1.4	ND	ND
Manganese - Dissolved	50		20	19	22	NM	NM	NM	NM	NM	NM	NM
Manganese - Total	50		NM	50		<5.0	<5.0	<5.0	354	30	ND	ND
Molybdenum - Dissolved	37			K 25	K 25	NM	NM	NM	NM	NM	NM	NM
Molybdenum - Total	37				K 25	NM	NM	NM	NM	NM	NM	NM -
Nickel - Dissolved		_			K 2.0	NM	NM	NM	NM	NM	NM	NM
Nickel - Dissolved	100		NM			<2.0		<2.0	30		ND	ND
Nickei - Total Silver - Total	34	^	NM	NM	K 2.0	<2.0 <0.5	<2.0 <0.5	NM		NM NM	NM	NM
		$\vdash$			NM			1	NM	NM	NM	NM
Strontium - Dissolved	4600	$\vdash$	230	260	260	NM NM	NM	NM	NM	NM	NM	· - ·
Strontium - Total	4600	Α.	NM	270	270	NM	NM	NM	NM	l		NM
Thallium - Total		Α	NM <sub>V</sub>	NM K 10	NM V 10	<2.0	<2.0	NM	NM	NM	NM _	NM -
Fitanium - Dissolved	NA NA	H			K 10	NM	NM	NM	NM	NM	NM	NM
Fitanium - Total	NA .	$\vdash$	NM K 40	21		NM NM	NM	NM	NM	NM	NM	NM
/anadium - Dissolved	4.5	$\vdash$		K 10	K 10	NM	NM	NM	NM	NM	<u>NM</u>	NM.
/anadium - Total	4.5	$\sqcup$			K 10	<10	<10	NM	NM	NM	NM_	NM .
Zinc - Dissolved	2400		350	210			NM 5000 DI	NM 4500 DI	NM	NM	NM	NM
Zinc - Total	2400	$\vdash$	NM	11000	10800	<b>50</b> 20 DL	5080 DL	1500 DL	3/3000 DL	38700 DL	2200 D	1600
Volatile Organic Compo	unds	H									>	
Tetrachloroethene	- 5	Α	120	170 100	120	5	   4		7.8	3.3	ND	ND
Trichloroethylene	5	Α	5.7	4.3	6.9				1.7			ND
cis-1,2-Dichloroethylene	70		16						1.7		2.6	
Base Neutrals							·   · ·· ·	1	-			
								···			-,,,,,	
ois(2-ethylhexyl)phtalate	6	A	NT	NM	_	32	34				NM	NM

	Action		Dates Sam	pled		-	T			
Inorganics	Level (1)		10/01/97	10/01/9	7	04/01/98	11/01/98	10/01/00	10/21/03	4/5-6/06
Boron - Dissolved	500	F	1126	 ∷ - ∶ <b>11</b>	ลบ สบ	1116	1090	NM	NM	NM
Boron in Water	500		NM	NM	JU	1123		610	170	
Calcium in Water	NA	Г	NM	NM		NM	NM	48.6		NM
	100	Λ	2.7			K 1.0	K 1.0	NM	NM	
Chromium - Dissolved			NM		2.9	-	+			NM 1.3
Chromium by Furnace	100			NM		K 1.0	K 1.0	<1.0	ND	
Iron - Dissolved	300		50		30	K 20	K 20	NM	NM	NM
Iron in Water	300	E	NM	NM	1		K 20	92	150	
Lithium - Dissolved	170			K 8.0		K 8.0	K 8	NM	NM	NM
Lithium in Water	170		NM	NM	-	K 8.0	K 8	<10	NM	NM
Magnesium in Water	400000		NM	NM	.	NM	NM	19.8	NM	NM
Mercury - Dissolved		Α		K 0.2 H	1	K 0.2	K 0.2	NM	NM _	NM
Mercury in Water	2	Α	NM	NM		K 0.2	K 0.2	<0.2 HT	NM	NM
Potassium in Water	NA NA		NM	NM	-	NM	NM	1.1	0.9	NM
Selenium by Furnace	50	Α	NM	NM	_	NM	NM	<1.0	NM	NM
Sodium in Water	125000		NM	NM	[	NM	NM	55.9	NM	NM
Aluminum - Dissolved	50	٧	K 50	K 50	1	K 50	K 50	NM	NM	NM
Aluminum - Total	50	٧	NM	NM		K 50	K 50	<50	ND	ND
Antimony - Total	6	Α	NM	NM		NM	NM	<1.0	NM	NM
Arsenic - Dissolved	50	A	11.3	11	1.5	11	K 1.0	NM	NM	NM
Arsenic - Total	50	A	NM	NM	-	12		13	NM	1.3
Barium - Dissolved	2000		33		33	35	+		NM	NM
Barium - Total	2000		NM	NM		35		35	NM	NM
Berylium - Dissolved		A	K 1	K 1		K1	K 1.0	NM	NM	NM
Berylium - Total		A	NM	NM		K1	K 1.0	<1.0	NM	NM
Cadmium - Dissolved		A	K 0.2	K 0.2		K 0.2	K 0.2	NM	NM	NM
Cadmium Total		Ā	NM	NM		K 0.2	K 0.2	1.4	NM	NM -
	40	^ -	K 15	K 15	ĺ	K 15	K 15	NM	NM	NM
Cobalt - Dissolved	40		NM	NM		K 15	K 15	<15	NM	NM
Cobalt - Total				K 1.0		1.4			NM	_
Copper - Dissolved	1000		K 1.0							NM_
Copper - Total	1000		NM	NM			K 1.0	<1.0	NM	NM
Lead - Dissolved	4	L	K 1.0	K 1.0		K 1.0	K 1.0	NM	NM	NM
Lead - Total	4	<u>L</u>	NM	NM	_		K 1.0	3.3		
Manganese - Dissolved	50		202		99	188		NM	NM	NM
Manganese - Total	50	E	NM	NM		201		131 DL	27	26
Molybdenum - Dissolved	37		K 25	K 25		K 25	K 25	NM	NM	NM
Molybdenum - Total	37		NM	NM		K 25	K 25	<25	NM	NM
Nickel - Dissolved	100	Α	4.6		4.8	6.4			NM	NM
Nickel - Total	100	Α -	NM	NM		6.2	7	6.2	8.2	ND
Silver - Total	34		NM	NM		NM	NM	<0.5	NM	NM
Strontium - Dissolved	4600		89		89	86			NM	NM
Strontium - Total	4600		NM	NM	į	87	85	72	NM	NM
Thallium - Total		A	NM	NM		NM	NM	<2.0	NM	NM
Titanium - Dissolved	NA		K 10	K 10		K 10	K 10	NM	NM	NM
Titanium - Total	NA		NM	NM		K 10	K 10	24	NM	NM
Vanadium - Dissolved	4.5		K 10	K 10		K 10	K 10	NM	NM	NM
Vanadium - Total	4.5	<del> </del>	NM	NM		K 10	K 10	<10	NM	NM
Zinc - Dissolved	2400		69		85	62			NM	NM
Zinc - Total	2400		NM	NM		6400		24500 DL		21000
Volatile Organic Compo					-					
Trichloroethylene	5	Α	4.5		4.8	4.3	5.5	14	4.7	1
Chloroform		A,W		ND		ND 4.	, 3.3 I	3.2		ND
					40		100			
Tetrachloroethylene	i 5	Α	250	. 4	٠ŧ٠	200	180	120	33	,

MW 105				1113 111				
Inorganics	Action		Dates	San	pled			
games	Level (1)		10/0	1/00	02/26/02	05/02/02	09/06/02	10/21/03
Boron in Water	500	F	<20		<20	K 20	K 20	ND
Calcium in Water	NA			17.3	NM	NM	NM	NM
Chromium by Furnace	100	Α	<1.0		<1.0	K 1.0	3.8	ND
Iron in Water	300	Ε		42	31	74	່ 540ໍ	110
Lithium in Water	170		<10		NM	NM	NM	NM
Magnesium in Water	400000			3.8	NM	NM	NM	NM
Mercury in Water	2	Α	<0.2	HT	NM	NM	K 0.2	NM
Potassium in Water	NA			1	1.3	1.1	0.8	1.2
Selenium by Furnace	50	Α	<1.0		NM	NM	NM	NM
Sodium in Water	125000		-	24	NM	NM	NM	NM
Aluminum - Total	50	٧	<50		<50	K 50	່. 90ໍ	ND
Antimony - Total	6	Α	<1.0		NM	NM	NM	NM
Arsenic - Total	50	Α		1.7	NM	NM	NM	NM
Barium - Total	2000	Α		24	NM	NM	NM	NM
Berylium - Total	4	Α	<1.0		NM	NM	NM	NM
Cadmium Total	5	Α	<0.2		NM	NM	NM	NM
Cobalt - Total	40		<15		NM	NM	NM	NM
Copper - Total	1000	Ε	<1.0		NM	NM	NM	NM
Lead - Total	4	L		4.2	1.3	1.2		1.8
Manganese - Total	50	Ε		5	<5.0	8.2	30	ND
Molybdenum - Total	37		<25		NM	NM	NM	NM
Nickel - Total	100	Α	<2.0		<2.0	K 2.0	4.8	ND
Silver - Total	34		<0.5		NM	NM	NM	NM
Strontium - Total	4600			38	NM	NM	NM	NM
Thallium - Total	2	Α	<2.0		NM	NM	NM	NM
Titanium - Total	NA		<10		NM	NM	NM	NM
Vanadium - Total	4.5		<10		NM	NM	NM	NM
Zinc - Total	2400		6410	0 DL	9500 DL	22600 DL	390000 DL	8700 D
Volatile Organic Compo	⊔ unds - All N □	ID						
Base Neutrals		-						
bis(2-ethylhexyl)phtalate	6	Α		8.2				NM

MW-201	Results in	uç	J/1	···	
MIAA-50 I	<u> </u>				ļ
Inorganics	Action		0-4-00	40/04/00	A/F C/00
· · · · · · · · · · · · · · · · · · ·	Level (1)		Oct-00	10/21/03	4/5-6/06
Boron in Water	500	F	67	ND	NM
Calcium in Water	NA		68	NM	NM
Chromium by Furnace	100	À	<1.0	130	430
Iron in Water	300	Ε	140	520	3900
Lithium in Water	170		25	NM	NM
Magnesium in Water	400000		19.8	NM	NM
Mercury in Water	2	Α	<0.2	NM	NM
Potassium in Water	NA	İ	1	0.8	NM
Selenium by Furnace	50	Α	<1.0	NM	NM
Sodium in Water	125000		8.9	NM	NM
Aluminum - Total	50	٧	164	ND	ND
Antimony - Total	6	Α	<1.0	NM	NM
Arsenic - Total	50	Α	<1.0	NM	1.2
Barium - Total	2000	Ā	14	NM	NM
Berylium - Total	4	Α	<1.0	NM	NM
Cadmium Total	5	Α	<0.2	NM	NM
Cobalt - Total	40		<15	NM	NM
Copper - Total	1000	Ε	7.8	NM	NM
Lead - Total	4	L	1.4	ND	1.1
Manganese - Total	50	Ē	12	ND	7.7
Molybdenum - Total	37		<25	NM	NM
Nickel - Total	100	Α	3.8	11	44
Silver - Total	34		<0.5	NM	NM
Strontium - Total	4600		57	NM	NM
Thallium - Total	2	Α	<2.0	NM	NM
Titanium - Total	NA		64	NM	NM
Vanadium - Total	4.5		<10	NM	NM
Zinc - Total	2400	1	58	12	36
Volatile Organic Compou	ınds - Ali Ni	)	-		
Dana Nastralia					
Base Neutrals				-	<u></u>
bis(2-ethylhexyl)phthalate	6	Α	. 14	NM	NM

MW 202		_	Results III	<u></u>			
Inorganics	Action				İ		
morgames	Level (1)		Oct-00	May-02	9/6/2002	10/21/03	4/5-6/06
	500	_	 				
Boron in Water	500	<u>-</u>	NM	46	L	-	NM
Calcium in Water	NA		69.8	NM	NM	NM	NM
Chromium by Furnace	100		1.6	2.4		ND	ND
Iron in Water	300		80	650	150		ND
Lithium in Water	170	_	NM	NM	NM	NM	NM
Magnesium in Water	400000		22.3	NM	NM	NM	NM
Mercury in Water	l	Α	<del></del>	NM	K 0.2	NM	NM
Potassium in Water	NA		2.3	3.6	2.8	_	NM
Selenium by Furnace	!	Α	<1.0	NM	NM	NM	NM
Sodium in Water	125000		18.6	NM	NM	NM	NM
Aluminum - Total	50		58		K 50	ND	ND
Antimony - Total			<1.0	NM	NM	NM	NM
Arsenic - Total	50	Α	<1.0	NM	NM	NM	ND
Barium - Total	2000	Α	30	NM	NM	NM	NM
Berylium - Total	4	Α	<1.0	NM	NM	NM	NM
Cadmium Total	5	Α	<0.2	NM	NM	NM	NM
Cobalt - Total	40		<15	NM	NM	NM	NM
Copper - Total	1000	Ε	2.4	NM	NM	NM	NM
Lead - Total	4	L	3.4	10	3.5	2	ND
Manganese - Total	50	Е	<5.0	28	K 5.0	ND	ND
Molybdenum - Total	37		NM	NM	NM	NM	NM
Nickel - Total	100	Α	4	4	2.5	2.2	ND
Silver - Total	34	İ	<0.5	NM	NM	NM	NM
Strontium - Total	4600		NM	NM	NM	NM	NM
Thallium - Total	-	Α	<2.0	NM	NM	NM	NM
Titanium - Total	NA		NM	NM	NM	NM	NM
Vanadium - Total	4.5	1	<10	NM	NM	NM	NM
Zinc - Total	2400	L	213 DL	710	·	210	
Volatile Organic Compou	nds						
Tetrachloroethylene	5	Α	2.1	ND		ND	
Base Neutrals					.		<u> </u>
bis(2-ethylhexyl)phthalate	-	Α	2.3	ND		ND	NM

MW 204S						ults in ug/l	T				
	Action		Dates	San	nled		1	. 			<u>.</u>
Inorganics	Level (1)	-	10/01		08/07/01	11/19/01	02/25/02	05/02/02	09/06/02	10/21/03	4/5-6/06
Boron in Water	500	F	<20		K 20	<20	<20	K20	K 20	ND	NM
Calcium in Water	NA			33.6	NM	NM	NM	NM	NM	NM	NM
Chromium by Furnace	100	Α	<1.0		5.8		2	1.1	K 1.0	ND	ND
Iron in Water	300	E		62	2400	4300	590	260	160	94	ND
Lithium in Water	170		<10		NM	NM	NM	NM	NM	NM	NM
Magnesium in Water	400000		15.8 H	T	NM	NM	NM	NM	NM	NM	NM
Mercury in Water	2	Α	<0.2		NM	NM	NM	1	K 0.2	NM	NM
Potassium in Water	NA			1	0.8	0.8	0.5	0.5	0.5	0.5	NM
Selenium by Furnace	50	Α	<1.0		NM	NM	NM	NM	NM	NM	NM
Sodium in Water	125000			3	NM	NM	NM	NM	NM	NM	NM
Aluminum - Total	50	V	<50		2600 DL	4550 DL	624	221	157	81	ND
Antimony - Total	6	Α	<1.0		NM	NM	NM	NM	NM	NM	NM
Arsenic - Total	50	Α	<1.0		NM	NM	NM	NM	NM	NM	NM
Barium - Total	2000	Α		16	NM	NM	NM	NM	NM	NM	NM
Berylium - Total	4	Α	<1.0		NM	NM	NM	NM	NM	NM	NM
Cadmium Total	5	Α	<0.2		NM	NM	NM	NM	NM	NM	NM
Cobalt - Total	40		<15		NM	NM	NM	NM	NM	NM	NM
Copper - Total	1000	E	<1.0		NM	NM	NM	NM	NM	NM	NM
Lead - Total	4	L	<1.0		19	51	Šc. 🖰 . 11	2.8	1.8	1.7	ND
Manganese - Total	50	Ε		13	80	76	10	K 5.0	K 5.0	ND	ND
Molybdenum - Total	37		<25		NM	NM	NM	NM	NM	NM	NM
Nickel - Total	100	A		6.4	39	21	4.9	3	2.7	2.4	ND
Silver - Total	34		<0.5		NM	NM	NM	NM	NM	NM	NM
Strontium - Total	4600			81	NM	NM	NM	NM	NM	NM	NM
Thallium - Total	2	Α	<2.0		NM	NM	NM	NM	NM	NM	NM
Titanium - Total	NA	1		17	NM	NM	NM	NM	NM	NM	NM
Vanadium - Total	4.5		<10	-	NM	NM	NM	NM	NM	NM	NM
Zinc - Total	2400		673 DI		13400 DL	11000 DL	1960 DL	794	491	330	51
Volatile Organic Compou	nds - All NI	D									
Base Neutrals		-									
bis(2-ethylhexyl)phthalate	6	Α		12				ND	ND		NM
4-Chloro-3-methylphenol	150		1	15	NM				NM		NM

MW 204D						ults in							
In a real and	Action		Dates	San	pled			1					
Inorganics	Level (1)		10/0		08/07/01	11/	19/01	(	02/25/02	05/02/02	09/06/02	10/21/03	4/5-6/06
Boron in Water	500	F	<20		K 20	<20		<	20	K 20	K 20	ND	 NM
Calcium in Water	NA	Ŀ		36.4	NM		MI		NM ===	NM	NM	NM	NM
Chromium by Furnace	100	Α		1.8	9	4		4 <		l .	K 1.0	ND	ND
Iron in Water	300	_	1	980	3200		790		180	1100	45	37	ND
Lithium in Water	170	_	<10		NM		M	_   -	NM	NM	NM	NM	NM
Magnesium in Water	400000			14.7	NM	±	١M		NM	NM	NM	NM	NM
Mercury in Water		Α	<0.2 H		NM	NM		N	IM	NM	K 0.2	NM	NM
Potassium in Water	NA		-	1.2	1.5			1	0.5	0.6	1.2	16.1	NM
Selenium by Furnace	50	Α	<1.0		NM		M	+	NM	NM	NM	NM	NM
Sodium in Water	125000		<u> </u>	2.5	NM		M		NM	NM	NM	NM	NM
Aluminum - Total		V	1270		3460 DL			1	98	1	K 50	ND	ND
Antimony - Total			<1.0		NM "		M		NM	NM	NM	NM	NM
Arsenic - Total	50	Α	<1.0		NM	N	NM		NM	NM	NM	NM	ND
Barium - Total	2000	Α		34	NM	N	M		NM	NM	NM	NM	NM
Berylium - Total	4	Α	<1.0		NM	Ī	M		NM	NM	NM	NM	NM
Cadmium Total	5	Α	<0.2		NM	_ N	ΜM		NM	NM	NM	NM	NM
Cobalt - Total	40		<15		NM	N	M	T	NM	NM	NM	NM	NM
Copper - Total	1000	Ε		1.2	NM	N	M	T	NM	NM	NM	. NM	NM
Lead - Total	4	L	-	14	30	·'.	8	5	4	14	1.5	2.4	1.1
Manganese - Total	50	Ε	Ī	25	73	- :	18	5	5.2	22	K 5.0	ND	NM
Molybdenum - Total	37		<25		NM	1	MI		NM	NM	NM	NM	NM
Nickel - Total	100	Α		5.8	51		8	6	47	24	2.6	ND	ND
Silver - Total	34		<0.5		NM	١	M		NM	NM	NM	NM	NM
Strontium - Total	4600			97	NM	N	MI		NM	NM	NM	NM	NM
Thallium - Total	2	Α	<2.0		NM	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	MV		NM	NM	NM	NM	NM
Titanium - Total	NA		I	74	NM	1	MV		NM	NM	NM	NM	NM
Vanadium - Total	4.5	1	<10		NM	1	MI		NM	NM	NM	NM	NM
Zinc - Total	2400		2880	DL	7380 DL	1160	0 DL	2	470 DL	6210 DL	1460 DL	5000 D	2000
Volatile Organic Compou	nds												
Benzene												5.5	ND
Base Neutrals									· <del>-</del>				
bis(2-ethylhexyl)phthalate	6	Α	Ka Fe	17				2		ND		NM	NM
4-Chloro-3-methylphenol	150		8.6 T		NM					ND		NM	NM

MW 205S		1					Results in u	19/1				· -				
	Action	Dates San	npled	4				<u> </u> 	 							
Inorganics	Level (1)	10/01/00	08/07/01	11/20/01	02/26/02	02/26/02	05/02/02	09/06/02	12/05/02	03/26/03	03/26/03	06/19/03	06/19/03	10/21/03	3/29-30/05	4/5-6/06
Boron in Water	500 F		25	27	<20	24	43	45	28	31	ND	ND	ND	ND	30	NM
Calcium in Water	NA	31.7	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	38.9	NM
Chromium by Furnace	100 /	× <1.0	5.6	6	2.4	2.4	4.1	K 1.0	K 1.0	ND	ND	ND	ND	ND	ND	ND
Iron in Water	300 E	57	1600	310	300	300	630	46	K 20	37	35	ND	ND	71	ND	24
Lithium in Water	170	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Magnesium in Water	400000	16.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	13.6	NM
Mercury in Water	2 4	<0.2 HT	NM	NM	NM	NM	NM	K 0.2	NM	NM	NM	NM	NM	NM	ND	NM
Potassium in Water	NA	0.7	0.7	0.6	0.6	0.6	0.7	0.8	0.7	0.6	1	0.6	0.6	0.6	0.7	NM
Selenium by Furnace	50 A	<b>&lt;</b> 1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Sodium in Water	125000	3.7	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	11.3	NM
Aluminum - Total		/ <50	1410 DL	204	189	139		K 50	K 50	ND	ND	ND	ND	ND	ND	ND
Antimony - Total	6 /		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Arsenic - Total	50 A	A <1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	ND
Barium - Total	2000		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	17	NM
Berylium - Total	4 4	1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cadmium Total	5 A	,	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cobalt - Total	40	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Copper - Total	1000 E		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Lead - Total	4 L	9.3	I	11	9.3	9.6	13	1		1	,	1.7	1.8	6.7	4.3	2
Manganese - Total	50 E				7				K 5.0	ND	ND	ND	ND	ND	ND	ND
Molybdenum - Total	37	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Nickel - Total	100 4			1	6.6	6.6	7	4	1	<del>                                      </del>	l .	ND	ND	3.4	ND	ND
Silver - Total	34	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Strontium - Total	4600	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	40	NM
Thallium - Total	1	\ <2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Titanium - Total	NA -	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Vanadium - Total	4.5	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Zinc - Total	2400	1670 DL	1480 DL		3230 DL	l i	3410 DL	1260 DL	1010 DL	2500 D	2600 D	640	L	3300 D	2800 D	1600
				X 1997 60% 962 1 8000in						]						
Volatile Organic Compou	nds		1	1 . 1		 		1	ļ i		]					
Trichloroethylene	5 A						17			ND	13	8.1	8.3	ND		ND
Tetrachlorethene	5 A	52		23	62	62	5100 DL	5200	2400	2000	t contract to the contract to	1600	1600	980	360	220
1,1,1,2-Tetrachloroethane	77		ND					0.9 J		ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethylene	70 A	A	ND				4.3			ND	ND	ND	ND	ND	ND	NF
Toluene															, -·· l	. 5
Base Neutrals								1		NM	NM	<u>-</u>				
4-Chloro-3-methylphenol	150	27									-	NM	NM	NM	NM	NM
bis(2-ethylhexyl)phtalate	6 4	√ *** 1 <b>6</b>	ND							1		NM	NM	NM	NM	NM

					Resul	ts in ug/l							
MW 205D													
Inorganics	Action	<b>Dates Sam</b>	pled										
morganics	Level (1)	10/01/00	08/07/01	11/20/01	02/26/02	05/02/02	09/06/02	12/05/02	03/26/03	06/19/03	10/21/03	3/29-30/05	4/5-6/06
	! !						 						
Boron in Water	500 F	NM	760	520	430	450	360	270	310	250	240	150	NM
Calcium in Water	NA	31.7	NM	NM	NM	NM	NM	NM	NM	NM	NM	40.9	NM
Chromium by Furnace	100 A	<1.0	27	6	1.3	3	2.2	1.7	1.5	ND	2.3	1.5	ND
Iron in Water	300 E	57	3800	2200	270	6600	1000	630	590	290	1000	450	210
Lithium in Water	170	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Magnesium in Water	400000	16.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	14.3	NM
Mercury in Water	2 A	<0.2 HT	NM	NM	NM	NM	K 0.2	NM	NM	NM	NM	ND	NM
Potassium in Water	NA	0.7	2.3	2.3	1.7	2	1.4	1.1	1	0.9	0.9	0.7	NM
Selenium by Furnace	50 A	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Sodium in Water	125000	3.7	NM	NM	NM	NM	NM	NM	NM	NM	NM	19.2	
Aluminum - Total	50 V	<50	4770 DL	2200 DL	96	9320 DL	1380 DL	630		I .	1100 D	490	220
Antimony - Total	6 A	<1.0	NM	NM	NM	MM	NM	NM	NM	NM	NM	ND	NM
Arsenic - Total	50 A	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	ND
Barium - Total	2000 A	13	NM	NM	NM	NM	NM	NM	NM	NM	NM	30	
Berylium - Total	4 A	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cadmium Total	5 A	<0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.61	
Cobalt - Total	40	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Copper - Total	1000 E	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	1	NM
Lead - Total	4 L	9.3	18	<u></u>	<1.0	<b>4.8</b>	1.4	i .	4.5	1.6	6.1	5.4	ND
Manganese - Total	50 E	6.1	111	102	77	207	92	87	100	78	77	54	
Molybdenum - Total	37	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Nickel - Total	100 A	6.7	34	7.4	3.4	12	4.6	4.5	4.5	2.4	4.3	3.3	2.3
Silver - Total	34	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Strontium - Total	4600	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	190	NM
Thallium - Total	2 A	<2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Titanium - Total	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	18	
Vanadium - Total	4.5	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Zinc - Total	2400	1670 DL	6430 DL	5690 DL	602	1540 DL	399	5020 DL	11000 D	2000 D	3600 D	4000 D	660
  Volatile Organic Compoun	nds											ļ	<u> </u>
cis-1,2-Dichloroethylene	40 A	1.4	11	11		7.5	7.5	6.8	13	7.8	4.7	3.9	3.6
trans-1,2-Dichloroethylene	100 A	i	ND	1.6	· <del></del>				ND	ND	1.1		ND
Trichloroethylene	5 A			25		3.9	5.8	7.4	29	16	31	. 29	
Tetrachloroethene	5 A		(14.7%.) 36.45%. (14.7%.) 18.66%. (14.7%.)	86	110					190	83		
Toluene		]			-·· 전					1.1		ND	ND
Bass Novembe									A18.4	NIN Ā	NINA		
Base Neutrals								T	NM	NM	NM	NM	NM
bis(2-ethylhexyl)phtalate		16							-				
4-Chloro-3-methylphenol	150	27	NM				İ	i				[	

						Results in	r ug/l			, <del> ,</del>		<del>,                                     </del>	
MW 207S		_					ļ			]			
Inorganics	Action	. 4 —	tes Sam	<u> </u>	11100	20/2							
	Level (1)		0/01/00	08/08/01	11/19/01	02/25/02	05/02/02	09/06/02	03/26/03	06/19/03	10/21/03	3/29-30/05	4/5-6/06
Boron in Water	500	F	25	NM	<20	<20	21	K 20	ND	ND	ND	ND	NM
Calcium in Water	NA		37.8	NM	NM	NM	NM	NM	NM	NM	NM	41.4	NM
Chromium by Furnace	100	Α	3.4	NM	5.2		<u> </u>	+	6.6	t I	11	1	
Iron in Water	300	ı	440	NM	1400			1	840	I	260		
Lithium in Water	170	<1		NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Magnesium in Water	400000		19.9	NM	NM	NM	NM	NM	NM	NM	NM	14.4	NM
Mercury in Water		A	.2 HT	NM	NM	NM	NM	K 0.2	NM	NM	NM	ND	NM
Potassium in Water	NA		0.7	NM	3.5				2.8	2.3	1.9	A	
Selenium by Furnace		A <1		NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Sodium in Water	125000		5.5	NM	NM	NM	NM	NM	NM	NM	NM	5	
Aluminum - Total	50	V :	242	NM	1210 DL	.⁴60	1	1		1600 D	270	520	580
Antimony - Total		A <1		NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Arsenic - Total	_	A <1		NM	NM	NM	NM	NM	NM	NM	NM	ND	ND
Barium - Total	2000	1	16	NM	NM	NM	NM	NM	NM	NM	NM	21	NM
Berylium - Total	4		.0	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cadmium Total	5			NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cobalt - Total	40	<1	5	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Copper - Total	1000	E <1	.0	NM	NM	NM	NM	NM	NM	NM	NM	2.1	NM
Lead - Total	4	- 1	3.4	NM	1.2	<1.0	K 1.0	K 1.0	ND	ND	ND	ND	ND
Manganese - Total	50	Εİ	15	NM		<5.0	1	K 5.0	20	15	5.8		
Molybdenum - Total	37	<2	5	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Nickel - Total	100	Α	48	NM	141	7.8	115		120	9.2	6	11	3.4
Silver - Total	34	<0	.5	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Strontium - Total	4600		44	NM	NM	NM	NM	NM	NM	NM	NM	54	·
Thallium - Total	2	A <2	.0	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Titanium - Total	NA		29	NM	NM	NM	NM	NM	NM	NM	NM	21	NM
Vanadium - Total	4.5	<1	0	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Zinc - Total	2400		146	NM	64	<10	51	K 10	45	31	17	69	47
Volatile Organic Comp	ounds								ND				
Tetrachloroethene	5	Α	1.5	1.2	1		1.4	1.2		1.3	1.2	1	2.

	<del>,</del>	_				Results in	ug/l	<del>,                                    </del>					<del></del>
MW 208		<u> </u>					<u> </u>	ļ ļ					
Inorganics	Action	<u></u>	Dates Sa										
	Level (1)	-	10/01/00	08/06/01	11/19/01	02/25/02	05/02/02	09/06/02	12/05/02	03/25/03	06/19/03	10/21/03	3/29-30/0
Boron in Water	500	F	<20	K 20	<20	<20	210	210	170	140	140	130	59
Calcium in Water	NA		32.	8 NM	NM	NM	NM	NM	NM	NM	NM	NM	31.7
Chromium by Furnace	100	Α		3 13	6.8	4.3	2.5	3.7	K 1.0	12	55	300	
Iron in Water	300	Е	65	0 1800	740	420	270	1100	120	400	1100	4800	110
Lithium in Water	170	1	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Magnesium in Water	400000	ļ —	12.	3 NM	NM	NM	NM	NM	NM	NM	NM	NM	17.4
Mercury in Water	2	Α	<0.2 HT	NM	NM	NM	NM	K 0.2	NM	NM	NM	NM	ND
Potassium in Water	NA	T	0.	9 0.8	0.7	0.6	0.8	1.1	0.9	1	1	1	1.
Selenium by Furnace	50	Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Sodium in Water	125000		1.	4 NM	NM	NM	NM	NM	NM	NM	NM	NM	20.8
Aluminum - Total	50	٧	89	8 1660 DL	723	417	208	1190 DL	114	ND	ND	92	ND
Antimony - Total	6	Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Arsenic - Total	50	Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Barium - Total	2000	Α	2	0 NM	NM	NM	NM	NM	NM	NM	NM	NM	20
Berylium - Total	4	Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Cadmium Total	5	Α	<0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Cobalt - Total	40		<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Copper - Total	1000	E	7.	3 NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Lead - Total	4	L	<1.0	3.4	1.3	1.2	K 1.0	1.4	K 1.0	ND	ND	ND	ND
Manganese - Total	50	E	1 4	3 59	15	14	7.3	17	K 5.0	11	11	20	ND
Molybdenum - Total	37		<25	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Nickel - Total	100	Α	6.	8 12	5.6	3.6	6.6	7.7	3.8	190	210	340	8.4
Silver - Total	34		<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Strontium - Total	4600	T -	4	4 NM	NM	NM	NM	NM	NM	NM	NM	NM	8
Thallium - Total	2	Α	<2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Titanium - Total	NA	İ	6	3 NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Vanadium - Total	4.5		<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Zinc - Total	2400		3	8 166	27	36	20	32	30	38	100	55	120
Volatile Organic Compo	unds					-							
Toluene											1	ND _	ND
Base Neutrals		<u> </u>						1					
bis(2-ethylhexyl)phtalate	6	A	is to the same of	MD			ND			NM .	NM	ПM	NM

MW 209						Results in							
	Action		Dates Sam	pled			! · ·				:	-	
Inorganics	Level (1)		10/01/00	08/06/01	11/19/01	02/25/02	05/02/02	09/06/02	12/05/02	03/25/03	06/19/03	10/21/03	3/29-30/0
							- ····	ţ	†·			— i=	
Boron in Water	500	F	NM	K 20	<20	270	270	230	210	180	150	140	6
Calcium in Water	NA		44.1	NM	NM	NM	NM	NM	NM	NM	NM	NM	44
Chromium by Furnace	100	Α	<1.0	12	6.2	3.8	K 1.0	1.3	32	40	55	84	45
Iron in Water	300	Е	<20	700	850	500	K 20	61	່ 530່	470	510	15 <b>00</b>	420
Lithium in Water	170		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Magnesium in Water	400000		13.7	NM	NM	NM	NM	NM	NM	NM	NM	NM	15.7
Mercury in Water	2	Α	<0.2 HT	NM	NM	NM	NM	K 0.2	NM	NM	NM	NM	ND
Potassium in Water	NA		0.7	0.5	0.4	0.7	0.6	0.7	0.7	0.6	0.7	0.6	
Selenium by Furnace	50	Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Sodium in Water	125000		2	NM	NM	NM	NM	NM	NM	NM	NM	NM	18
Aluminum - Total	50	٧	<50	484	700	436	K 50	K 50	K 50	ND	ND	ND	ND
Antimony - Total	6	Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Arsenic - Total	50	Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Barium - Total	2000	Α	9	NM	NM	NM	NM	NM	NM	NM	NM	NM	13
Berylium - Total	4	Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Cadmium Total	5	Α	<0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Cobalt - Total	40		<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Copper - Total	1000	E	7.1	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Lead - Total			<1.0	4.8	5.4	3.7	K 1.0	K 1.0	2	1	ND	ND	ND
Manganese - Total	50		5.9	41	35		K 5.0	K 5.0	K 50	8.9	20	22	
Molybdenum - Total	37		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Nickel - Total	100	Α	3.6	13	6.6	6.7	3.5	L	33	44	47	57	
Silver - Total	34		<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Strontium - Total	4600		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	55
Thallium - Total	1	Α	<2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Titanium - Total	NA		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Vanadium - Total	4.5		<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Zinc - Total	2400		151	787	643	624	150	1	239	69	90	36	<del></del>
Volatile Organic Compo	ounds									· ·   - · · ·			
Tetrachloroethene	5	Α		ND	ļ		1.8			ND		ND	ND
Toluene			İ	<del></del>					 		1.2		
Base Neutrals						· ——		ļ ļ				· · ·	ļ
bis(2-ethylhexyl)phtalate	6	Α	<b>1.30</b>	ND			-					NM	NM

MW 210		-			Results in t	ugn		1				
	Action	Dates Sam	pled	-				<u> </u>	. — — —			-·
Inorganics	Level (1)	10/01/00	08/06/01	11/19/01	02/25/02	05/02/02	09/06/02	12/05/02	03/25/03	06/19/03	10/21/03	3/29-30/05
						ii		į - į				
Boron in Water	500 F		280	270	210	220	180	150	150	130	117	61
Calcium in Water	NA	47.8	NM	NM	NM	NM	NM	NM	NM	NM	NM	45.8
Chromium by Furnace	100 A	<b>4 &lt;1.0</b>	14	2	<1.0	3	K 1.0	K 1.0	ND	ND	ND	ND
Iron in Water	300 E	130	16000	6800	<b>9</b> 50	7400	170	470	510	74	19 <b>90</b>	210
Lithium in Water	170	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Magnesium in Water	400000	15.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	15.7
Mercury in Water		4 <0.2 HT	NM	NM	NM	NM	K 0.2	NM	NM	NM	NM	ND
Potassium in Water	NA	0.7	1.3	1.1	0.7	0.9	1.1	1	0.9	0.9	0.9	0.8
Selenium by Furnace	50 A		NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Sodium in Water	125000	18.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	20.7
Aluminum - Total	50 \			114	<50	237	K 50	K 50	ND	ND	ND	ND
Antimony - Total	6		NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Arsenic - Total		A <1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	2.2
Barium - Total	2000	13	NM	NM	NM	NM	NM	NM	NM	NM	NM	12
Berylium - Total	4		NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Cadmium Total	5		NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Cobalt - Total	40	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Copper - Total	1000 E		NM	NM	NM	NM	NM	NM	NM	NM	MM	ND
Lead - Total	4 L		7.3	6.3	2.4		K 1.0	1.5	1.4	ND	3.3	
Manganese - Total	50 E		92	46	6.3	51	K 5.0	5.2	ND	ND	12	
Molybdenum - Total	37	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Nickel - Total	100		20	4.5	3.2		2.7		2.4	2.1	3.5	
Silver - Total	34	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Strontium - Total	4600	. NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	96
Thallium - Total	2/4	A <2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Titanium - Total	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Vanadium - Total	4.5	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND
Zinc - Total	2400	313	7380 DL	392	308	1210 DL	79	145	110	85	700	360
								<u> </u>	,			
Volatile Organic Compo	unds - All N							ļ ļ				
Dana Maudania												
Base Neutrals												
  bis(2-ethylhexyl)phtalate	6	A 32	ND			ND			NM	NM	NM	NM

			_			F	Results in u	g/l							
MW 212D									-						
Inorganics	Action		Dates Sam									_			
	Level (1)		10/01/00	08/07/01	11/20/01	02/27/02	05/02/02	05/02/02	09/06/02	12/05/02	03/26/03	06/19/03	10/21/03	3/29-30/05	4/5-6/06
Boron in Water	500	F	NM	720	650	770	<sup> </sup> 750	740	750	780	510	610	480	85	NM
Calcium in Water	NA	1	30.7		NM	NM	NM	NM	NM	NM	NM	NM	NM	51.7	NM
Chromium by Furnace	100	Α	<1.0	220	61		1.9	1	K 1.0	1.2	ł — — —	<u> </u>	21		
Iron in Water	300		+	54000 DL	16000	3200	940	1	710	1	1	l .	5600	I .	30
Lithium in Water	170	+ .	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Magnesium in Water	400000	;	11.3		NM	NM	NM	NM	NM	NM	NM	NM	NM	15.4	i
Mercury in Water		Α	1		1	NM	NM	i	K 0.2	NM	NM	NM	NM	ND	NM
Potassium in Water	NA	1:	7.1		2.1		1.1	1.1	1	1	0.8		1.1		NM
Selenium by Furnace	50	Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Sodium in Water	125000	,	15.8	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	6.7	NM
Aluminum - Total	50				6930 DL	1780 DL	272	1	214	1		l .	2800 D	160	ND
Antimony - Total		A	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Arsenic - Total	50		<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1.9	ND
Barium - Total	2000		39	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	71	NM
Berylium - Total		Α	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cadmium Total		Α	<0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cobalt - Total	40	1	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Copper - Total	1000		<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Lead - Total		Ĺ	7.8	115	I .	I	7.2	i	4.3	I	1	J	89	1	15
Manganese - Total	50			1200 DL	334	127	75		76				200		
Molybdenum - Total	37		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Nickel - Total	100	ţ	2.8	104	1	1		1	5.1	4.2		1		+	<del></del>
Silver - Total	34	1	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Strontium - Total	4600		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	510	
Thallium - Total	,	A	<2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Titanium - Total	NA -		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Vanadium - Total	4.5		<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Zinc - Total	2400	1	1900 DL	30200 DL	16700 DL		3150 DL	3060 DL	1850 DL	2910 DL	6500 D	1700 D	25000 D	6100 D	15000
		<del> </del>	1,000	1	1				1	1			]		
Volatile Organic Compo	unds							i I							
- Grant Gran		1					· ·		<del> </del> · · · ·						
cis-1,2-Dichloroethylene	70	Α	T	4.1	6		4	4.1	6.6	10	4.8	11	5.6	ND	ND
Trichloroethylene		A	1.8	91	130		32		20				17		12
Tetrachloroethene		A	8.3	77			51	90					170	53	
Methylene chloride		A		ND	T	i : <del></del>				1	ND	ND	ND	ND	ND
Chloroform		A,W	9.8		İ			-		†·· · ·	ND	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1									† ·	†	-	1	1
, , , , , , , , , , , , , , , , , , , ,		<del>                                     </del>										-	-		
Base Neutrals							ND	ND			_				
bis(2-ethylhexyl)phtalate	6	A		14	   }   <b>12</b>	6.1		:		-	NM	NM	NM	NM	NM
4-Chloro-3-methylphenol	150		44		!				1-		NM	NM	NM	NM	NM

								Results in t	<u> 19/1</u>									
MW 213D														_				
Increasion	Action	Dates San	npled						· · · · · · · · · · · · · · · · · · ·									1
Inorganics	Level (1)	10/01/00	10/01/00	08/08/01	11/20/01	02/26/02	05/02/02	<b>09/06</b> /02	09/06/02	12/05/02	03/26/03	03/26/03	06/19/03	06/19/03	10/21/03	10/21/03	3/29-30/05	4/5-6/06
			i i	<u> </u>				<u> </u>		į į			ļ		_			
Boron in Water	500 F		<20	29	43				NM	27	37	25	27	31	31	29	1	
Calcium in Water	NA _	45			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	47.3	
Chromium by Furnace	100 A	1.4				<1.0	2		NM	K 1.0	11	11	ND	ND	ND_	ND	8.9	
Iron in Water	300 E				1400		K 20	<b>20</b> 00	NM	K 20	3600	3500	ND	ND	ND	ND	710	
Lithium in Water	170	<10	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	<u>NM</u>	NM	NM	ND	NM
Magnesium in Water	400000	22	1	<del></del>	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	16.1	
Mercury in Water			<0.2 HT	NM	NM	NM		K.2	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Potassium in Water	NA_	3.8			3.9				NM	2.2		1.9	1.4	1.4	1.3	1.3		
Selenium by Furnace	1	<1.0	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Sodium in Water	125000	23.6		1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	15.6	
Aluminum - Total	50 V		<50	634	955		K 50	283 <b>0 D</b> L	NM	K 50		2300 D	ND	ND	ND	ND	530	ND
Antimony - Total	6 A		<1.0	NM	NM	NM	NM	NM	NM	<u>NM</u>	NM	NM	NM	NM	NM	NM	ND	NM
Arsenic - Total	50 A		<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	ND
Barium - Total	2000 A	29	29		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	23	
Berylium - Total	4 A	1	<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Cadmium Total	5 A	<0.2	<0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.42	
Cobalt - Total	40	<15	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Copper - Total	1000 E		<1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1.7	
Lead - Total	4 L	<1.0	<1.0	1.4		<1.0	K 1.0	5.6	NM	K 1.0	12	11	ND	ND	ND	ND	9.6	ND
Manganese - Total	50 E	<5	<5.0	28		<5.0	K 5.0	112	NM	K 5.0	120	120	ND	ND	7	ND	22	
Molybdenum - Total	37	<25	<25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM .	ND	NM
Nickel - Total	100 A	20	1 .	4.9	6.1	l	+		NM	2.1	9.9		5.3	2.1	3.3	2.6		.4
Silver - Total	34	<0.5	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Strontium - Total	4600	65			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	46	
Thallium - Total	- t-	<2.0	<2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Titanium - Total	NA	26		<u></u>	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	16	
Vanadium - Total	4.5	<10	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Zinc - Total	2400	59	71	163	442	337	16	379	NM	74	4800	4300 D	120	120	340	280	14000 D	420
			ļ			L												
Volatile Organic Compo	unds																	
	ļ										ļ							
Tetrachloroethene	5 A	320	390	390	450 J	450	220 DL	260	260	92	53	47	47	46	19	17		
Toluene							! <del>↓</del>						1.9	1.7	ND	ND	ND	ND
Trichloroethylene	5 A					ļ	ļ											4.6
Base Neutrals																		
hia/O athudhaud)mhtalata	- A	46		ND		<del> </del>	] 				NM	NM	NM	NM	NM	NM	NM	<u> </u>
bis(2-ethylhexyl)phtalate	) 6 A			ND			taviers la				INIVI	INIVI	ININ	IVIVI	(Alta	ININ	IVIVI	!

								Results in u	ıg/ı									
MW 213S																		
	Action	Dates Sar	npled															
Inorganics	Level (1)	10/01/00	08/08/01	11/20/01	11/20/01	02/26/02	02/26/02	05/02/02	09/06/02	12/05/02	03/26/03	03/26/03	06/19/03	06/19/03	10/21/03	10/21/03	3/29-30/05	4/5-6/06
Boron in Water	500					<20	<20	K 20	25	35	43	39	33	31	43	 41	32	NM
Calcium in Water	NA	49.6	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	40.5	NM
Chromium by Furnace	100				!					3.1	190	. 170	57	67	12	14	7.4	1.3
Iron in Water	300	E 67	9700	2100	2200	780	760	51	43	45	4100	3600	470	580	530	430	150	ND
Lithium in Water	170	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	MM	NM	ND	NM
Magnesium in Water	400000	22.6	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	13.8	NM
Mercury in Water	2	4 <0.2 HT	NM	NM	NM	NM	NM	NM	K 0.2	NM	NM	NM	NM	NM	NM	NM	ND	NM
Potassium in Water	NA	2.3	1.9	1.2	1.2	1.1	1	0.9	1.2	2.9	3.2	3.2	3	2.9	3.2	3.3	2.8	NM
Selenium by Furnace	50	A <1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Sodium in Water	125000	11.4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	38.2	NM
Aluminum - Total	50 \	V . 81	126000 DL	2110 DL	2140 DL	768	735	K 50	K 50	K 50	670	530 ີ	63	70	ND	67	ND	ND
Antimony - Total	6	A <1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Arsenic - Total	50	A <1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	ND
Barium - Total	2000	A 21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	26	NM
Berylium - Total	4	A <1.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ЙM	NM	ND	NM
Cadmium Total	5 /	A <0.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.65	NM
Cobalt - Total	40	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NŌ	NM
Copper - Total	1000	E   1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Lead - Total	4	L 1.3	9.4	6.6	6.9	9.5	9.6	3.5	K 1.0	1.2	8.4	່ 7.6ີ	1.7	1.8	1	ND	1.5	ND
Manganese - Total	50	E 14	- 311			18	17	K 5.0	14	K 5.0	30	26	ND	5.7	25	24	ND	ND
Molybdenum - Total	37	<25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Nickel - Total	100	A 8.5	25	8.5	8.9	6.7	6.6	3.5	84	27	120	120	31	31	130	100	13	4
Silver - Total	34	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Strontium - Total	4600	53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	45	NM
Thallium - Total	2	A <2.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Titanium - Total	NA	15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Vanadium - Total	4.5	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM
Zinc - Total	2400	476	445	1380 DL	1480 DL	6490 DL	6330 DL	952	92	312	490	460	81	87	120	120	3300 D	33
Volatile Organic Compo	unds					<del> </del>												<u></u> J  .
Takin ahlamaathan a	_	<u> </u>	. 44 1	49	 	47	47	ˈ ' 30	160	510	400	390	200	220	130	160	100	62
Tetrachloroethene	13000	<u>4</u> 40	41 J ND	49	48	4/	<b>4/</b>	30	100	510	400	380 6.8	ND	ND	ND ISO	ND ND	ND	ND
2-Butanone	13000		עא	<b></b>	<del> </del>	<del> </del>	<del> </del>	<del> </del>				0.8	1.4	0.99	ND			ND ND
Toluene													1.4	0.99	- ND		טאו	ַטַ <u>יאַ</u>
Base Neutrals						ļ			-		NM	NM	NM		NM	NM	NM	NM
bis(2-ethylhexyl)phtalate	6	 A \$337 547 <b>17</b>	│ □ 2.1	2.2		3.6		14		i								

MW-206S			ilts in ug/l			
Increasing	Action	_			. —	· ·· ·
Inorganics	Level (1)	_	10/01/00	12/05/02	10/21/03	4/5-6/06
Boron in Water	500	F	NM	46	120	NM
Calcium in Water	NA	†	37.6	NM	NM	NM
Chromium by Furnace	100	Α	110	1.4	ND	7
Iron in Water	300	Ε	29	K 20	25	3600
Lithium in Water	170		NM	NM	NM	NM
Magnesium in Water	400000		14.7	NM	NM	NM
Mercury in Water	2	Α	<0.2 HT	NM	NM	NM
Potassium in Water	NA		2	0.6	1.1	NM
Selenium by Furnace	50	Α	<1.0	NM	NM	NM
Sodium in Water	125000		13.3	NM	NM	NM
Aluminum - Total	50	٧	<50	K 50	ND	3000 D
Antimony - Total	6	Α	<1.0	NM	NM	NM
Arsenic - Total	50	Α	<1.0	NM	NM	2
Barium - Total	2000	Α	59	NM	NM	NM
Berylium - Total	4	Α	<1.0	NM	NM	NM
Cadmium Total	5	Α	<0.2	NM	NM	NM
Cobalt - Total	40		<15	NM	NM	NM
Copper - Total	1000	E	<1.0	NM	NM	NM
Lead - Total	4	L	3.1	K 1.0	2.8	6.4
Manganese - Total	50	Е	14	K 5.0	ND	100
Molybdenum - Total	37		NM	NM	NM	NM
Nickel - Total	100	Α	4.3	K 2.0	ND	8.2
Silver - Total	34		<0.5	NM	NM	NM
Strontium - Total	4600		NM	NM	NM	NM
Thallium - Total	2	Α	<2.0	NM	NM	NM
Titanium - Total	NA		NM	NM	NM	NM
Vanadium - Total	4.5		<10	NM	NM	NM
Zinc - Total	2400		486	44	680	990
Volatile Organic Compou	nds					
Trichloroethylene	5	Α	1.1	1.1	3.7	ND
Tetrachloroethylene	5	Α	4	1	9.2	
Base Neutrals				. •		
4-Chloro-3-methylphenol	150	+	] 20		NM	NM
bis(2-ethylhexyl)phthalate	6	Α	28		NM	NM

MW-206D		$\overline{}$	Results in	ug/i			<u> </u>
MIAA-500D	Action	_		_	! - <u>-</u>		
Inorganics	Level (1)		10/01/00	10/01/00	12/05/02	10/21/03	4/5-6/06
Boron in Water	500	F	NM	NM	35	75	NM
Calcium in Water	NA		35.7	35.5	NM	NM	NM
Chromium by Furnace	100	Α	3.8	4.4	1.3	7.9	ND
Iron in Water	300	Ε	<b>8</b> 90	920	54	60	ND
Lithium in Water	170		NM	NM	NM	NM	NM
Magnesium in Water	400000		18.1	18	NM	NM	NM
Mercury in Water	2	Α	<0.2 HT	<0.2 HT	NM	NM	NM
Potassium in Water	NA		1.2	1.2	0.8	0.8	NM
Selenium by Furnace	50	Α	<del></del>	<1.0	NM	NM	NM
Sodium in Water	125000		9.8	8.7	NM	NM	NM
Aluminum - Total			560 DL		K 50	ND	ND
Antimony - Total	·	Α		<1.0	NM	NM	NM
Arsenic - Total	50	Α	<1.0	<1.0	NM	NM	ND
Barium - Total	2000	Α	24	24	NM	NM	NM
Berylium - Total	4	Α	<1.0	<1.0	NM	NM	NM
Cadmium Total	5	Α	<0.2	<0.2	NM	NM	NM
Cobalt - Total	40		<15	<15	NM	NM	NM
Copper - Total	1000	Е	1.4	1.1	NM	NM	NM
Lead - Total	4	L	2.2	2.6	1.4	5.2	ND
Manganese - Total	50	E	16	18	K 5.0	ND	ND
Molybdenum - Total	37		NM	NM	NM	NM	NM
Nickel - Total	100	Α	09	88	2.6	2.2	ND
Silver - Total	34		<0.5	<0.5	NM	NM	NM
Strontium - Total	4600		NM	NM	NM	NM	NM
Thallium - Total	2	Α	<2.0	<2.0	NM	NM	NM
Titanium - Total	NA		NM	NM	NM	NM	NM
Vanadium - Total	4.5		<10	<10	NM	NM	NM
Zinc - Total	2400	-	63	79	260	2800 D	180
Volatile Organic Compour	nds						
Tetrachloroethylene	5	Α	110	110	8	4.9	9!
Trichloroethylene	5	Α	ND	ND	ND	13	
trans-1,2-Dichloroethylene	100	Α	ND	ND	ND	1.3	ND
Base Neutrals					-		
bis(2-ethylhexyl)phthalate	6	Α	 			NM	NM

MW-211S	tosuits in agr			
Incomplian	Action	 		
Inorganics	Level (1)	-	Oct-00	4/5-6/06
Boron in Water	500	F	NM	
Calcium in Water	NA		40.2	
Chromium by Furnace	100	Α	<1.0	·
Iron in Water	300	Ε	30	
Lithium in Water	170		NM	<del> </del>
Magnesium in Water	400000	ĺ	17.2	<u> </u>
Mercury in Water	2	Α	<0.2 HT	
Potassium in Water	NA		0.5	
Selenium by Furnace	50	Α	<1.0	
Sodium in Water	125000	İ	2.7	<del> </del>
Aluminum - Total		V	<50	
Antimony - Total	6	Α	<1.0	
Arsenic - Total	50	Α	<1.0	
Barium - Total	2000	Α	9.5	;
Berylium - Total			<1.0	NM
Cadmium Total			<0.2	NM
Cobalt - Total	40		<15	NM
Copper - Total	1000	Ε	<1.0	NM
Lead - Total	4	L	1.4	1.
Manganese - Total	50	_	<5.0	ND
Molybdenum - Total	37	<del>-</del> -	NM	NM
Nickel - Total	100	Α	3.8	ND
Silver - Total	34		<0.5	NM
Strontium - Total	4600	T	NM	NM
Thallium - Total	2	Α	<2.0	NM
Titanium - Total	NA	†··-	NM	NM
Vanadium - Total	4.5		<10	NM
Zinc - Total	2400	1 -	34	60
Chromium by Furnace	100			1.
Iron in Water	300	Ε	· · · · · · · · · · · · · · · · · · ·	7
Volatile Organic Compo	unds - All N	ID.		
Base Neutrals				· 
bis(2-ethylhexyl)phtalate	6	Α	12	NM

MW 207D					dits in agn						
Ingraphica	Action	Dates San	npled								
Inorganics	Level (1)	08/08/01	11/19/01	02/25/02	05/01/02	09/06/02	03/26/03	06/19/03	10/21/03	3/29-30/05	4/5-6/06
Boron in Water	500 F	NM	33	<20	36	K 20	24	ND	ND	22	NM
Chromium by Furnace	100 A	NM	7.1	3.1	8.3	1.8	2.4	1.8	3.4	4.6	2.3
Iron in Water	300 E	NM	890	71	690	36	120	57	53	90	40
Mercury in Water	2 A	NM	NM	NM	NM	K 0.2	NM	NM	NM	ND	NM
Potassium in Water	NA	NM	0.7	0.5	0.6	0.5	0.5	0.5	0.5	0.4	NM
Aluminum - Total	50 V	NM	943	<50	585	K 50	82	59	ND	ND	ND
Lead - Total	4 L	NM	6.2	4.5	8.6	2.6	3	3.9	15	5.2	2.2
Manganese - Total	50 E	NM	22	<5.0	15	K 5.0	ND	ND	ND	ND	ND
Nickel - Total	100 A	NM	5.5	3.4	5.4	3.1	2.7	2.4	3.7	ND	ND
Zinc - Total	2400	NM	1820 DL	1520 DL	2280 DL	941	1800	2100 D	6700 D	2500 D	1400
Volatile Organic Comp	ounds										
Tetrachloroethene	5 A	4.3	5.3	5.2	l. 6	1.5	1.1	ND	ND	1.2	4.7

MW-211D	loodito iii aga			
Inorganics	Action	ļ		
·	Level (1)		Oct-00	4/5-6/06
Boron in Water	500	F		
Calcium in Water	NA		12.2	
Chromium by Furnace	100	Α	15.5	
Iron in Water	300	Ε	120	
Lithium in Water	170		NM	
Magnesium in Water	400000	ĺ	14.1	
Mercury in Water	2	Α	<0.2 HT	
Potassium in Water	NA		2.8	
Selenium by Furnace	50	Α	<1.0	
Sodium in Water	125000	İ	6	
Aluminum - Total	<del></del>	V	148 DL	L
Antimony - Total	6	Α	<1.0	
Arsenic - Total	50	Α	<1.0	<del></del>
Barium - Total	2000	Α	14	
Berylium - Total	4		<1.0	
Cadmium Total	5	Α	<0.2	
Cobalt - Total	40		<15	
Copper - Total	1000	Е	12	
Lead - Total	4	L		ND
Manganese - Total	50	Ē	6.3	ND
Molybdenum - Total	37		NM	NM
Nickel - Total	100	Α	<2.0	ND
Silver - Total	34		<0.5	NM
Strontium - Total	4600		NM	NM
Thallium - Total	2		<2.0	NM
Titanium - Total	NA	1	NM	NM
Vanadium - Total	4.5	<u> </u>	<10	NM
Zinc - Total	2400		457	200
Volatile Organic Compo	und <b>s</b>			
Di-n-butyl phthalate	880		8.3 T,J	NM
Carbon disulfide				3.2
Base Neutrals				
bis(2-ethylhexyl)phtalate	6	Α		NM
4-Chloro-3-methylphenol	150		120	NM

					Results in	ug/i					
MW 212S											
Inorganics	Action		<b>Dates Sam</b>	pled						Ī	
morganics	Level (1)		02/27/02	05/02/02	09/06/02	12/05/02	03/26/03	06/19/03	10/21/03	3/29-30/05	4/5-6/06
Boron in Water	500	F	810	 		290	170	210	150	110	NM
Chromium by Furnace	100	Α	120	60	27	14.2	12	11	23	28	19
Iron in Water	300	Ε	80000 DL	28000DL	1 <b>20</b> 00	6700	6200	5700	13000	12000	8000
Mercury in Water	2	Α	NM	NM	K 0.2	NM	NM	NM	NM	ND	l NM
Potassium in Water	NA		2.9	3.2	2.6	1.3	1.2	1.5	1.4	0.9	NM
Aluminum - Total	50	٧	65400 DL	36500 DL	11000 DL	5760 DL	4600 D	5400 D	10000 D	12000 D	8100 D
Lead - Total	4	L	150	61	30	21	30	17	44	47	20
Manganese - Total	50	Ε	1970 DL	730	<b>32</b> 9	267	390	390	420	260	160
Nickel - Total	100	Α	128	57	29	14	17	20	32	25	14
Zinc - Total	2400		41300 DL	22800 DL	10200 DL	6440 DL	30000 D	19000 D	19000 D	17000 D	3300
Volatile Organic Compo	unds	ļ .									· · -
cis-1,2-Dichloroethylene	70	Α		1.5	1.4		ND	1.5	ND	ND	ND ND
Trichlorothylene	5	Α		4.4	3.5	2.1	2.1	2.4	1.9	ND	ND
Tetrachloroethene	5	Α	120	110	140	110	65	96	31	25	30
1,2-Dichlorobenzene	600	Α	<u> </u>	1.1	,		ND	ND	ND	ND	ND ]

MW 215					sults in ug/l						
	Action	Dates San	pled				<del></del>				
Inorganics	Level (1)	10/01/00	08/08/01	08/08/01	11/20/01	11/20/01	02/25/02	05/02/02	09/06/02	10/21/03	4/5-6/06
Boron in Water	500 F	NM	250	260	300	290	NM	69	37	ND	<u>NM</u>
Calcium in Water	NA NA	53	NM	NM	NM	NM	NM	NM	NM	NM -	NM
Chromium by Furnace	100 A					4	NM		K 1.0	ND	ND
Iron in Water	300 E			33000 DL	, 7700	1 :	NM	84		ND -	47
Lithium in Water	170	NM	NM	NM	-	NM	NM	NM	NM	NM	NM
Magnesium in Water	400000	19.8	NM	NM	NM	NM	NM	NM	NM	NM	NM
Mercury in Water	i	<0.2 HT	NM	NM	NM	NM	NM	1	K 0.2	NM	NM
Potassium in Water	NA Z	1.3	2.2			1	NM	0.9		0.7	NM
Selenium by Furnace		<1.0	NM	NM	NM 1.4	NM I.4	NM	NM	NM	NM	NM
Sodium in Water	125000	32.6	NM	NM	NM	NM	NM	NM	NM	NM	NM
Aluminum - Total	50 V			30400 DL		9090 DL	NM	78	64	ND	ND
Antimony - Total	6 A		NM	NM	NM	NM	NM	NM	NM [	NM	NM
Arsenic - Total	50 A	4.2	NM	NM	NM	NM	NM	NM	NM	NM	1.6
Barium - Total	2000 A			NM	NM -	NM	NM	NM	NM	NM	NM
Berylium - Total		<1.0	NM	NM	NM	NM	NM	NM	NM	NM	i NM
Cadmium Total	5 A		NM	NM	NM —	NM	NM	NM	NM	NM	NM
Cobalt - Total	40	<15	NM	NM	NM	NM	NM	NM	NM	NM	NM
Copper - Total	1000 E			NM	NM	NM	NM	NM	NM	NM	NM
Lead - Total	4 L	30	1		્રે 29		NM	24	3	ND ND	ND
Manganese - Total	50 E	_			180		NM		K 5.0	6.3	L
Molybdenum - Total	37	NM	NM	NM	NM NM	NM	NM	NM	NM	NM	NM
Nickel - Total	100 A		82		25		NM		K 2.0	3.3	
Silver - Total	34	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM
Strontium - Total	4600	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Thallium - Total	2 A		NM	NM	NM	NM	NM	NM	NM	NM	NM
Titanium - Total	NA NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Vanadium - Total	4.5	<10	NM	NM	NM	NM	NM	NM	NM	NM	NM
Zinc - Total	2400	8350 DL	]	23400 DL		7510 DL	NM	9220 DL	1650 DL	33	530
Volatile Organic Compo	unds										
Trichloroethylene	5 A	2.8	1.1	2.4	4.2	3.8		1.5	1.6	ND	ND D
Tetrachloroethene	5 A	2.0 3∴56	34			84	70		24	5	l ' '
Base Neutrals										. <u>-</u>	<u>-</u>
bis(2-ethylhexyl)phtalate	6 A				9.3		100	12		NM	NM
Di-n-octyl pthalate	130	2.8	8.6	14		8.5		1		NM_	NM

Results	in	ug/l
	_	

MW 301S													
Increasion	Action	Ī	Dates San	nple	ed						i		-
Inorganics	Level (1)		09/06/02	1	2/05/02	12/05/02	2	03/25/03	06/19/03	10/21/03	8/23-24/04	3/29-30/05	4/5-6/06
Boron in Water	500	F	28		31	2	7 K	(20	 ND	ND	ND	ND	NM
Chromium by Furnace	100	A	3.4	1	1.7	1.8	8	3.1	ND	ND	ND	ND	ND
Iron in Water	300	E	250		95	110	0,	3100	140	120	ND	35	ND
Mercury in Water	2	Α	K 0.2	1				NM	NM	NM	NM	ND	NM
Potassium in Water	NA		0.6		0.6	0.0	6	0.5	0.5	0.5	0.5	0.5	NM
Aluminum - Total	50	V	200	K	50	· 50	0 1	1,500DL	79	76	ND	ND	ND
Lead - Total	4	L	1	K 1	1.0	K 1.0		4.7	ND	ND	ND	ND	ND
Manganese - Total	50	Е	12		9.6	9.	5	38	ND	ND	ND	ND	ND
Nickel - Total	100	Α	2.6	K 2	2.0	K 2.0	-	5	ND	2.2	ND	ND	ND
Zinc - Total	2400		261	<del> </del>	297	32	1 1	1,100DL	140	240	30	270	83
Volatile Organic Comp	ounds						.						
Tetrachloroethene	5	Α	] 400. ši <b>21</b> 4		5.9		6	2.4	8.2	4.4	ND	1.7	1.1
Trichloroethylene	5	Α	}		1.1		Γ	ND	ND	ND	ND	ND	ND

MW 301D		Π									
Ingragnics	Action		<b>Dates Sam</b>	pled						<u> </u>	
Inorganics	Level (1)	ļ Ļ	09/06/02	09/06/02	12/05/02	03/25/03	06/19/03	10/21/03	8/23-24/04	3/29-30/05	4/5-6/06
Boron in Water	500	F	K 20		K 20	K20	ND	ND —	ND	ND	NM
Chromium by Furnace	100	Α	6.6	<del></del>	3	2.7	ND	3.3	ND	ND	1.1
Iron in Water	300	Ε	670	-	80	85	320	720	ND	220	78
Mercury in Water	2	Α	K 0.2			NM	NM	NM	NM	ND	NM
Potassium in Water	NA	T	0.5		0.5	0.5	0.4	0.6	4.2	0.6	NM
Aluminum - Total	50	٧	275		K 50	K50	77	390	ND	ND	ND
Lead - Total	4	L	2.8		2.3	3.3	ND	1.8	1.1	ND	2.9
Manganese - Total	50	Ε	37		6.9	K5	36	47	ND	43	5.9
Nickel - Total	100	Α	2.8		K 2.0	K2.0	ND	3	ND	ND	ND
Zinc - Total	2400	-	442		1880 DL	2,600DL	330	1500 D	1600 D	670	4100
Volatile Organic Comp	⊦ oounds - Al	I N	ID								

MW-302									
Increonice	Action	D	ates Sam	pled					
Inorganics	Level (1)		09/06/02	12/05/02	03/26/03	06/19/03	10/21/03	3/29-30/05	4/5-6/06
Boron in Water	500	F		52	36	42	35	<u> </u> 	ND
Chromium by Furnace	100	A		44	3.4	11	2.8		1.3
Iron in Water	300 1	Εİ		<b>140</b> 00	1400	4200	1200		ND
Mercury in Water	2	Α			NM	NM	NM	ND	NM
Potassium in Water	NA			0.9	0.8	1	0.8	1.2	NM
Aluminum - Total	50	v 📗	'	8570 DL	1,100DL	3400 D	900	12000 D	ND
Lead - Total	4 1	L	•	<b>1</b> 9	1.4	6.5	1.3	15	ND
Manganese - Total	50	ΕÌ		÷ 1279	39	96	41	240	ND
Nickel - Total	100	Α		20	3	8.7	4.8	26	ND
Zinc - Total	2400	-		7060 DIL	1,200DL	2600 D	270	4000 D	1600
Volatile Organic Compou	nds				ND _	ND	ND	ND	ND
Tetrachlorethene	5	A	2.3						
Base Neutrals									
Bis(2-ethylhexyl)phthalate	6	A	5.7	2	NM	NM	NM	NM	NM

					<u>suits ii</u>	, <u>ug.,</u>					
MW-303											
Inorganice	Action		<b>Dates Sam</b>	pled							
Inorganics	Level (1)		09/06/02	09/06/02	12/0	05/02	03/26/03	06/19/03	10/21/03	3/29-30/05	4/5-6/06
Boron in Water	500	F				33	23	ND	<b>41</b>	39	NM -
Chromium by Furnace	100	Α				1.6	2.5	ND	29	3.2	2.3
Iron in Water	300	Ε	1			250	450	130	2400	600	740
Mercury in Water	2	Α					NM	NM	NM	ND	NM
Potassium in Water	NA					0.8	1	1.3	0.9	1.6	NM
Aluminum - Total	50	V			K 50		K50	ND	1600	110	52
Lead - Total	4	L			K 1.0		1.1	ND	2.1	10	1.5
Manganese - Total	50	Ε			K 5.0		K5	ND	32	10	6
Nickel - Total	100	Α	T			2.3	2.5	2.1	8.1	ND	ND
Zinc - Total	2400					125	510	74	250	9000 D	2900
Volatile Organic Comp	oounds										
Trichloroethylene	5	Α	1.3	1.4			ND	ND	ND	ND	ND
Tetrachloroethene	5	Α	1900	2200	192	1200	780	590	630	200	170

Results in ug/l MW 304S **Dates Sampled** Action Inorganics Level (1) 09/06/02 12/05/02 03/25/03 06/19/03 10/21/03 4/5-6/06 39 NM Boron in Water 500 F 52 40 40 ND Chromium by Furnace K1 ND ND ND 100 A K 1.0 K 1.0 28 K20 Iron in Water 300 E 25 ND 23 ND Mercury in Water 2 A K 0.2 NM NM NM NM Potassium in Water 1.3 1.2 NA 1.6 0.9 1.3 NM Aluminum - Total 50 V K 50 K50 ND ND ND K 50 Lead - Total 4 L K 1.0 ND ND K 1.0 K1 ND Manganese - Total 50 E KM 5.0 K 5.0 K5 ND ND ND Nickel - Total 2.8 100 A 2.3 2.6 2.5 4.4 Zinc - Total 2400 K 10 K 10 K10 ND ND ND Volatile Organic Compounds

NM

15

NM

23

NM

32

2.1

Di-n-butyl phthalate

Methyltertbutylether

880

MW 3041														
	Action	i	Dates San	pled										
Inorganics	Level (1)	-	09/06/02	12/0	5/02	12/0	5/02	03/2	25/03	06/19/03	10/21/03	3/29-30/0	4/5-6/0	)6
Boron in Water	500	F	32		31		37		37	33	35	ND	NM	
Chromium by Furnace	100	Α	K 1.0	K 1.0		K 1.0		K1		ND	1	ND	ND	
Iron in Water	300	Ε	25		24		32		27	ND	750	42	ND	
Mercury in Water	2	Α	K 0.2				-	NI	М	NM	NM	ND	NN	1
Potassium in Water	NA		1.6		1.5		1.6		1.5	1.6	1.7	1.1	NM	
Aluminum - Total	50	٧	K 50	K 50		K 50		K50	1	ND	530	ND	ND	
Lead - Total	4	L	K 1.0	K 1.0		K 1.0		K1	-  -	ND	ND	ND	ND	
Manganese - Total	50	Ε	74		12	T	13		7.9	ND	56	18	ND	
Nickel - Total	100	Α	3.9		3.5		3.7		3.3	5.1	3.5	3.7	ND	
Zinc - Total	2400		K10	K 10		K 10	-	K10	-	ND	ND	16	ND	
Volatile Organic Comp	ounds							-	- +					
Toluene		-								1.1	ND	ND	ND	-
Methyltertbutylether									İ		1.6	2.8	3	3.9
Base Neutrals						<del>  -</del>							-	
Di-nbutyl phthalate	880		1.5			ļ - · ·		N	м	NM	NM	NM	NN	1

MW 304D						<u> </u>	n ug/i					T	
Inorganics	Action Level (1)		Dates 09/0			05/02	03/2	5/03	06/19/03	10/21/03	3/29-30/0	5 4/5-6/0	6
Boron in Water	500	F		31		30		36	33	34	22	NM	
Chromium by Furnace	100	Α	K 1.0		K 1.0	)	K1		ND	ND	ND	ND	
Iron in Water	300	Ε		150		82	-  -	72	75	50	120	03/25	5/00
Mercury in Water	2	Α	K 0.2				NI	и	NM	NM	ND	NM	I
Potassium in Water	NA			1.5		1.6		1.4	1.4	1.2	1.2	NM	
Aluminum - Total	50	٧	K 50		K 50		K50		ND	ND	ND	ND	
Lead - Total	4	L	K 1.0		K 1.0		K1		ND	ND	ND	ND	-
Manganese - Total	50	Ε		37		25		27	29	24	70	)	54
Nickel - Total	100	Α		3.5		3.1		3	3.3	2.5	2.2	ND	
Zinc - Total	2400		K 10		K 10		K10	-	ND	ND	11	ND	
Volatile Organic Comp	ounds												
Toluene							NE	5	1.1	ND	ND	ND	
Methyltertbutylether							N	)		ND	5.2	2	3.4

					L/G	Suits ii	ı ug/ı					
MW 305S	_											
l	Action		Dates Sar	npled		Ī				-		
Inorganics	Level (1)		09/06/02	12/05	5/02	03/2	25/03	06/19/03	10/21/03	8/23-24/04	3/29-30/05	4/5-6/06
Boron in Water	500	F	33	3	38		39	32		42	42	NM
Chromium by Furnace	100	Α	K 1.0	K 1.0		K1	-  -	ND	ND	ND	ND	1.9
Iron in Water	300	Ε	59	K 20		K20		ND	27	ND	ND	2
Mercury in Water	2	Α	K 0.2			N	M	NM -	NM	NM	ND	NM
Potassium in Water	NA		2.5	5	2.2		2	1.9	1.8	1.6	1.4	NM
Aluminum - Total	50	V	5.	K 50		K50		ND	ND	ND	ND	ND
Lead - Total	4	L	K 1.0	K 1.0		K1		ND	ND	ND	ND	ND
Manganese - Total	50	E	80	)	23	K5		ND	ND	ND	ND	7.3
Nickel - Total	100	Α	3.4	1	2.3		2.5	2.6	4	2.1	ND	1
Zinc - Total	2400	-	K 10	K 10		K10		ND	ND	ND	ND	ND
Volatile Organic Comp	oounds											
Tetrachloroethene	5	Α	3.4	]   1400   1700	5.1	L	4.5	5.3	2.4	2.8	3.9	3.9
Methvitertbutvlether			ND	$^{ ceil}$ ND	1	N	D	ND	1.5	1.9	ND	ND

	<del>,</del>	,	7		,		Julio II	1 49,.							,	
MW 3051									]							
Inorganics	Action		Dates	San	npled										ļ	
morganics	Level (1)		09/0	6/02	12/0	)5/02	03/2	25/03	06/19/03	10/21/03	8/23-	24/04	3/29-30	/05	4/5-6/	06
Boron in Water	500	F	K 20		K 20		K20		ND	 ND	ND		ND		NM	
Chromium by Furnace	100	Α	K 1.0		K 1.0		K1		ND	ND	ND		ND		ND	
Iron in Water	300	Ε		450	,	640		520	540	450	1	470	4	20		300
Mercury in Water	2	Α	K 0.2				NA		NM	NM	NM		ND		NM	
Potassium in Water	NA	Ī		1.6	l .	0.8		0.7	0.7	0.6		0.6		0.6	NM	
Aluminum - Total	50	٧	veries.	249	r <b>a</b>	245	K50		61	ND		90	•	53	ND	
Lead - Total	4	L	K 1.0		K 1.0		K1		ND	ND	ND		ND		ND	
Manganese - Total	50	Ε		38		30		27	28	25		28		29		25
Nickel - Total	100	Α	K 2.0		K 2.0		<b>K2</b> .0	-	ND	2.6	ND		ND		ND	
Zinc - Total	2400	<u>.</u>	K 10		K 10		K10		ND	ND	ND	-	ND		ND	
Volatile Organic Comp	oounds - A	I N	ID.									_				

						176	<u>Sull</u>	12 11	ug/i								
MW 305D							-				_						
Ingenerates	Action		Da	tes Sar	np	oled				į							
Inorganics	Level (1)		0	9/06/02	2	12/05/02	2 (	03/25	5/03	06/19/03	10/21/03	8/23-	24/04	3/29	-30/05	4/5-6	/06
Boron in Water	500	F	K 2	20	k	( 20	K2	20	-	ND	ND	ND		ND		NM	
Chromium by Furnace	100	Α	K 1	.0	K	( 1.0	K1	1		ND	ND	ND		ND		ND	
Iron in Water	300	E		35	5	40			56	190	91		32		190		180
Mercury in Water	2	Α	K 0	).2			N/	4	-	NM	NM	NM		ND		NM	
Potassium in Water	NA			0.7	1	0.6	3		0.6	0.6	0.6		0.6		0.6	NM	
Aluminum - Total	50	٧	K 5	50	K	<b>50</b>	K	50		230	94	ND			330		270
Lead - Total	4	L	K 1	.0	K	( 1.0	K1	<u> </u>		ND	ND	ND		ND		ND	
Manganese - Total	50	Ε	1	23	1	21		-	22	26	25		27		28		25
Nickel - Total	100	Α	K 2	2.0	K	( 2.0	K2	2	Ţ	ND	3.9	ND		ND		ND	
Zinc - Total	2400		K 1	0	K	( 10	K1	10		ND	10	ND		ND		ND	
Volatile Organic Comp	pounds			-			-										
Toluene		-	-		-		-	ND		1	ND	ND		1	ND	ND	

# Table 4 Extraction Wells-Recent Groundwater Analytical Data

#### ATTACHMENT D

**Groundwater Analytical Data Summary Tables** 

#### WASH KING LAUNDRY SITE Baldwin, MI

#### Summary of Quarterly GW Extraction Well & CBAS Effluent Data

#### Year 2006

SAMPLE LOCATION	PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
EW - 1	Benzene	ug/L	<1.0	<1.0		
F44 - 1	Toluene	ug/L ug/L	<1.0 <1.0	<1.0		
	Ethylbenzene	ug/L	<1.0	<1.0		
	Xylenes	ug/L	<3.0	<3.0		
	MTBE	ug/L	<1.0	<1.0		
	TCE	ug/L	7.0	4.9		
	PCE	ug/L	24	23		
	1,2,4-T <b>M</b> B	ug/L	<1.0	<1.0		
	1,3,5-T <b>M</b> B	ug/L	<1.0	<1.0		
	Naphthalene	ug/L	<5.0	<5.0		
	2-MN	ug/L	<5.0	<5.0		
SAMPLE LOCATION	PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
	, <del></del>					-
EW - 2	Benzene	ug/L	<5.0	<1.0		
	Toluene	ug/L	<5.0	<1.0		
	Ethylbenzene	ug/L	<5.0	<1.0		
	Xylenes	ug/L	<3.0	<3.0		
	MTBE	ug/L	<5.0	<1.0		
	TCE	ug/L	<5.0	2.9		
	PCE	ug/L	330	2,000		
	1,2,4-TMB	ug/L	<5.0	<1.0		
	1,3,5-TMB	ug/L	<5.0	<1.0		
	Naphthalene	ug/L	<25	<5.0		
	2-MN	ug/L	<25	<5.0		
SAMPLE LOCATION	PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
EW - 4	Ponzono	ua!!	<1.0	<1.0		
CAA - 4	Benzene Toluene	ug/L	<1.0	<1.0 <1.0		
		ug/L	<1.0 <1.0	<1.0 <1.0		
	Ethylbenzene	ug/L	<3.0	<3.0		
	Xylenes MTBE	ug/L ug/L	<1.0	<1.0		
	TCE	ug/L ug/L	<1.0	<1.0		
	PCE	ug/L ug/L	1.9	2.8		
	1,2,4-TMB	ug/L	<1.0	<1.0		
	1,3,5-TMB	ug/L	<1.0	<1.0		
	Naphthalene	ug/L	<5.0	<5.0		
	2-MN	ug/L	<5.0	<5.0		

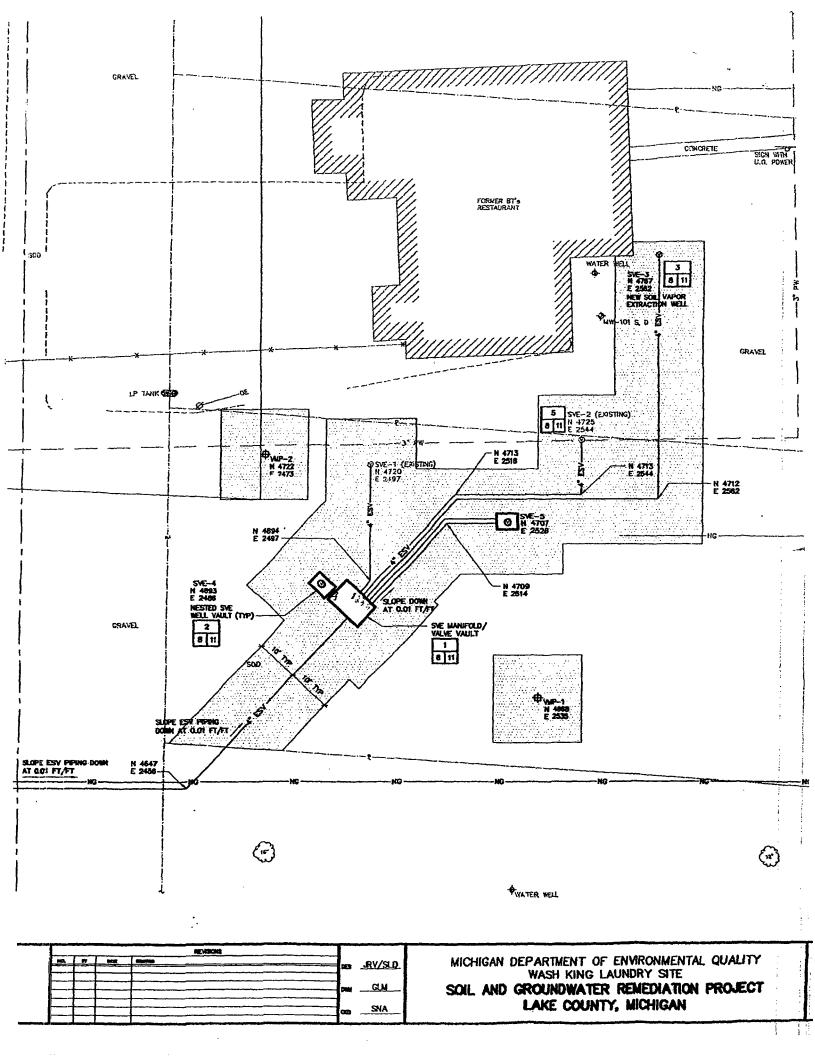
SAMPLE LOCATION	PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
EW - 5	Benzene	ug/L	<1.0	<1.0		
	Toluene	ug/L	<1.0	<1.0		
	Ethylbenzene	ug/L	<1.0	<1.0		
	Xylenes	ug/L	<3.0	<3.0		
	MTBE	ug/L	<1.0	<1.0		
	TCE	ug/L	9.1	9.7		
	PCE	ug/L	62	120		
	1,2,4-TMB	ug/L	<1.0	<1.0		
	1,3,5-TMB	ug/L	<1.0	<1.0		
	Naphthalene	ug/L	<5.0	<5.0		
	2-MN	ug/L.	<5.0	<5.0		
			4/18/2006	6/15/2006		
SAMPLE LOCATION	PARAMETER	UNITs	RESULT	RESULT	RESULT	RESULT
EW - 6	Benzene	ug/L	<5.0	<5.0		
	Toluene	ug/L	<5.0	<5.0		
	Ethylbenzene	ug/L	<5.0	<5.0		
	Xylenes	ug/L	<3.0	<3.0		
	MTBE	ug/L	<5.0	1.3		
	TCE	ug/L	7.8	7.1		
	PCE	ug/L	210	220		
	1,2,4-T <b>M</b> B	ug/L	<5.0	<5.0		
	1,3,5-TMB	ug/L	<5.0	<5.0		
	Naphthalene	ug/L	<25	<25		
	2-MN	ug/L	<25	<25		
			4/18/2006	6/15/2006		
SAMPLE LOCATION	PARAMETER	UNITs	RESULT	RESULT	RESULT	RESULT
Combined GW	Benzene	ug/L	<1.0	<1.0		
Influent	Toluene	ug/L	<1.0	<1.0		
	Ethylbenzene	ug/L	<1.0	<1.0		
	Xylenes	ug/L 	<3.0	<3.0		
	MTBE	ug/L	<1.0	<1.0		
	TCE	ug/L	7.8 460	6.1 240		
	PCE	ug/L	<b>150</b> <1.0	<b>240</b> <1.0		
	1,2,4-TMB	ug/L	<1.0 <1.0	<1.0 <1.0		
	1,3,5-TMB	ug/L	< 1.0 < 5.0	< 1.0 < 5.0		
	Naphthalene 2-MN	ug/L	<5.0 <5.0	<5.0 <5.0		
	4-IVIIV	ug/L	<b>~</b> 5.0	<b>~</b> 0.0		

SAMPLE LOCATION	PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
CBAS - 1	Benzene	ug/L	<1.0	<1.0		
Effluent	Toluene	ug/L	<1.0	<1.0		
	Ethylbenzene	ug/L	<1.0	<1.0		
	Xylenes	ug/L	<3.0	<3.0		
	MTBE	ug/L	<1.0	<1.0		
	TCE	ug/L	<1.0	<1.0		
	PCE	ug/L	<1.0	<1.0		
	1,2,4-TMB	ug/L	<1.0	<1.0		
	1,3,5-TMB	ug/L	<1.0	<1.0		
	Naphthalene	ug/L	<5.0	<5.0		
	2-MN	ug/L	<5.0	<5.0		
			4/18/2006	6/15/2006		
SAMPLE LOCATION	PARAMETER	UNITs	RESULT	RESULT	RESULT	RESULT
			7			
CBAS - 2	Benzene	ug/L	<1.0	<1.0		
Effluent	Toluene	ug/L	<1.0	<1.0		
	Ethylbenzene	ug/L	<1.0	<1.0		
	Xylenes	ug/L	<3.0	<3.0		
	MTBE	ug/L	<1.0	<1.0		
	TCE	ug/L	<1.0	<1.0		
	PCE	ug/L	<1.0	<1.0		
	1,2,4-TMB	ug/L	<1.0	<1.0		
	1,3,5-TMB	ug/L	<1.0	<1.0		
	Naphthalene	ug/L	<5.0	<5.0		
	2-MN	ug/L	<5.0	<5.0		
SAMPLE LOCATION	PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
Lagoon	Benzene	ug/L	<1.0	<1.0		
	Toluene	ug/L	<1.0	<1.0		
	Ethylbenzene	ug/L	<1.0	<1.0		
	Xylenes	ug/L	<3.0	<3.0		
	MTBE	ug/L	<1.0	<1.0		
	TCE	ug/L	<1.0	<1.0		
	PCE	ug/L	<1.0	<1.0		
	1,2,4-TMB	ug/L	<1.0	<1.0		
	1,3,5-TMB	ug/L	<1.0	<1.0		
	Naphthalene	ug/L	<5.0	<5.0		
	2-MN	ug/L	<5.0	<5.0		

# Table 5 Recent Soil Vapor Extraction Well Analytical Data

#### ATTACHMENT C

Vapor Analytical Data Summary Tables



### WASH KING LAUNDRY SITE Baldwin, MI

#### Summary of Quarterly SVE & CBAS Vapor Effluent Sampling Data

#### Year 2006

SAMPLE LOCATION	PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
SVE Well - 1	Benzene	ug/L	No Data	<0.3		
•	Toluene	ug/L		<0.3		
	Ethylbenzene	ug/L		<0.3		
	Xylenes	ug/L		<0.9		
	TCE	ug/L		<0.3		
	PCE	ug/L		<0.3		
	1,2,4-TMB	ug/L		<0.3		
	1,3,5-TMB	ug/L		<0.3		
			4/18/2006	6/15/2006		
SAMPLE LOCATION	PARAMETER	UNITs	RESULT	RESULT	RESULT	RESULT
CVE Wall 0	D	_	N - D - 4 -	-0.0		
SVE Well - 2	Benzene	ug/L	No Data	<0.3		
	Toluene	ug/L		<0.3		
	Ethylbenzene	ug/L		<0.3		
	Xylenes TCE	ug/L		<0.9 <0.3		
	PCE	ug/L		<0.3		
	1,2,4-TMB	ug/L ug/L		<0.3		
	1,3,5-TMB	ug/L ug/L		<0.3		
	1,0,0 111115	ug/L		-0.0		
			4/18/2006	6/15/2006		
SAMPLE LOCATION	PARAMETER	UNITs	RESULT	RESULT	RESULT	RESULT
SVE Well - 3	Penzono	0	No Doto	<0.3		
SAE AAGII - 2	Benzene Toluene	ug/L	No Data	<0.3 <b>0.4</b>		
		ug/L		<0.3		
	Ethylbenzene	ug/L		<0.3 <0.9		
	Xylenes TCE	ug/L		<0.3		
	PCE	ug/L ug/L		<0.3		
	1,2,4-TMB	ug/L ug/L		<0.3		
	1,3,5-TMB	ug/L ug/L		<0.3		
	1,0,0 1 110	ug/L		-0.0		

SAMPLE LOCATION	I PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
SVE Well - 4S	Ponzono	#	-10	<b>-0.3</b>		
SVE Well - 45	Benzene Toluene	ug/L	<1.0 <1.0	<0.3 <0.3		
		ug/L				
	Ethylbenzene	ug/L	<1.0	<0.3 <0.9		
	Xylenes TCE	ug/L	<3.0			
	PCE	ug/L	<1.0	<0.3		
		ug/L	<1.0	<0.3		
	1,2,4-TMB	ug/L	<1.0	<0.3		
	1,3,5-TMB	ug/L	<1.0	<0.3		
SAMPLE LOCATION	PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
	_					
SVE Well - 4D	Benzene	ug/L	<1.0	<0.3		
	Toluene	ug/L	<1.0	0.4		
	Ethylbenzene	ug/L	<1.0	<0.3		
	Xylenes	ug/L	<3.0	<0.9		
	TCE	ug/L	<1.0	<0.3		
	PCE	ug/L	<1.0	<0.3		
	1,2,4-TMB	ug/L	<1.0	<0.3		
	1,3,5-TMB	ug/L	<1.0	<0.3		
			4/18/2006	6/15/2006		
SAMPLE LOCATION	PARAMETER	UNITs	RESULT	RESULT	RESULT	RESULT
SVE Well - 5S	Benzene	ug/L	No Data	<0.3		
	Toluene	ug/L		<0.3		
	Ethylbenzene	ug/L		<0.3		
	Xylenes	ug/L		<0.9		
	TCE	ug/L		<0.3		
	PCE	ug/L		<0.3		
	1,2,4-TMB	ug/L		<0.3		
	1,3,5-TMB	ug/L		<0.3		
			4/18/2006	6/15/2006		
SAMPLE LOCATION	PARAMETER	UNITs	RESULT	RESULT	RESULT	RESULT
SVE Well - 5D	Benzene	ug/L	<1.0	<0.3		
	Toluene	ug/L	<1.0	<0.3		
	Ethylbenzene	ug/L	<1.0	<0.3		
	Xylenes	ug/L	<3.0	<0.9		
	TCE	ug/L	<1.0	<0.3		
	PCE	ug/L	<1.0	<0.3		
	1,2,4-TMB	ug/L	<1.0	<0.3		
	1,3,5-TMB	ug/L	<1.0	<0.3		
	.,-,	~9, <b>-</b>		4.0		

SAMPLE LOCATION	PARAMETER	UNITs	<b>4/18/2006</b> RESULT	6/15/2006 RESULT	RESULT	RESULT
Combined SVE	Benzene	ug/L	<1.0	<0.3		
Influent	Toluene	ug/L	<1.0	0.4		
(a.k.a. "Effluent")	Ethylbenzene	ug/L	<1.0	<0.3		
(a.n.a. Elitablic)	Xylenes	ug/L	<3.0	<0.9		
	TCE	ug/L	<1.0	<0.3		
	PCE	ug/L	<1.0	<0.3		
	1,2,4-TMB	ug/L	<1.0	<0.3		
	1,3,5-T <b>M</b> B	ug/L	<1.0	<0.3		
	1,0,0	49.2	1.0	.0.0		
			4/18/2006	6/15/2006		
SAMPLE LOCATION	PARAMETER	UNITs	RESULT	RESULT	RESULT	RESULT
			-	<u>—</u>		
CBAS - 1	Benzene	ug/L	<1.0	<0.3		
Effluent	Toluene	ug/L	<1.0	0.4		
	Ethylbenzene	ug/L	<1.0	<0.3		
	Xylenes	ug/L	<3.0	<0.9		
	TCE	ug/L	<1.0	<0.3		
	PCE	ug/L	<1.0	1.6		
	1,2,4-T <b>M</b> B	ug/L	<1.0	<0.3		
	1,3,5- <b>TM</b> B	ug/L	<1.0	<0.3		
			4/18/2006	6/15/2006		
SAMPLE LOCATION	PARAMETER	UNITs	RESULT	RESULT	RESULT	RESULT
CBAS - 2	Benzene	ug/L	<1.0	<0.3		
Effluent	Toluene	ug/L	<1.0	0.4		
	Ethylbenzene	ug/L	<1.0	<0.3		
	Xylenes	ug/L	<3.0	<0.9		
	TCE	ug/L	<1.0	<0.3		
	PCE	ug/L	<1.0	1.6		
	1,2,4-TMB	ug/L	<1.0	<0.3		
	1,3,5-TMB	ug/L	<1.0	<0.3		

**Figures** 

Figure 1

Site Location Map

### Wash King Laundry Superfund Site

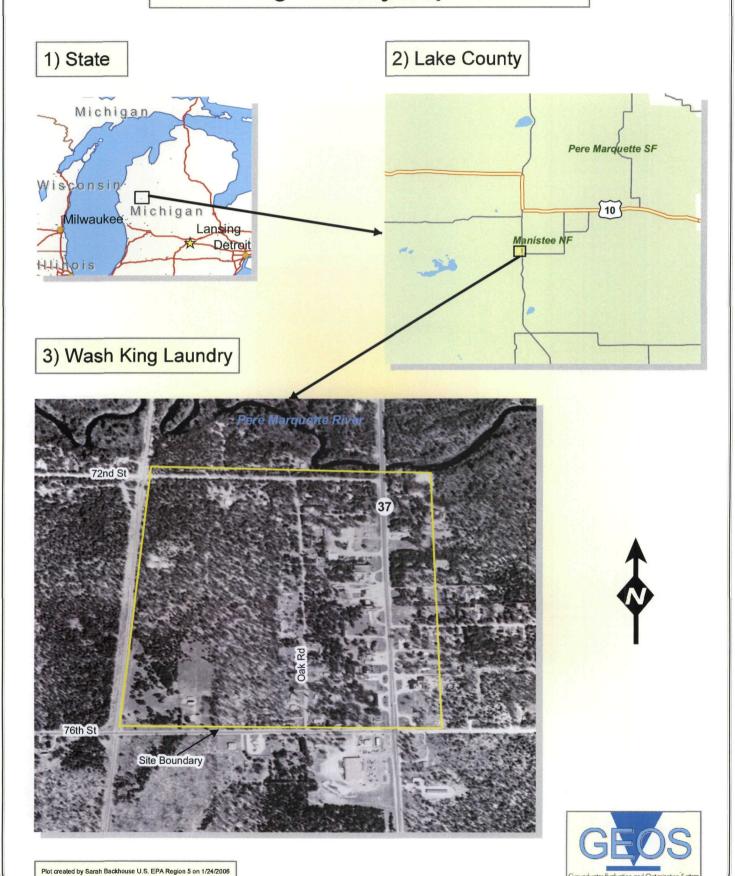


Figure 2 Site Map-Plan View

### Wash King Laundry Superfund Site 3D Surface Terrain Model

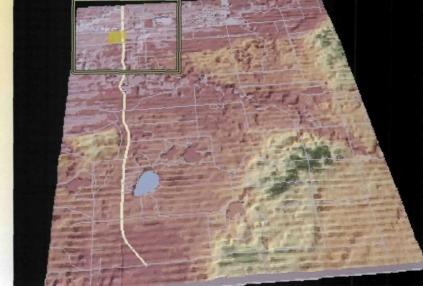


#### **Elevation Feet**

- 1038 1073
- 1003 1038
  - 968 1003
  - 933 968
  - 898 933
  - 863 898
  - 828 863
  - 793 828

  - 758 793







Plot created by Sarah Backhouse U.S. EPA Region 5 on 1/24/2006

Figure 3

SVE System Components

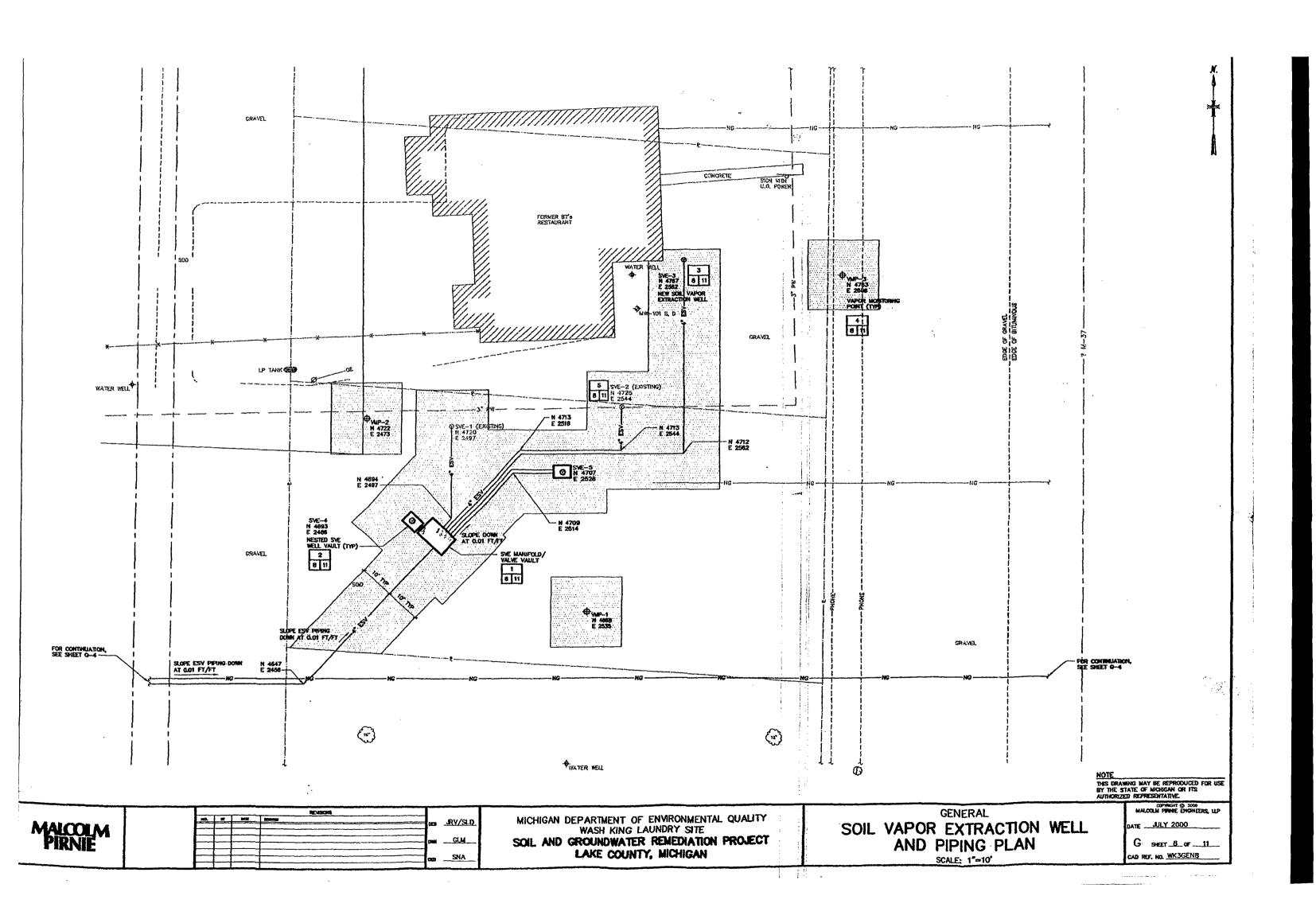


Figure 4

Ethene Concentrations in the Shallow Zone

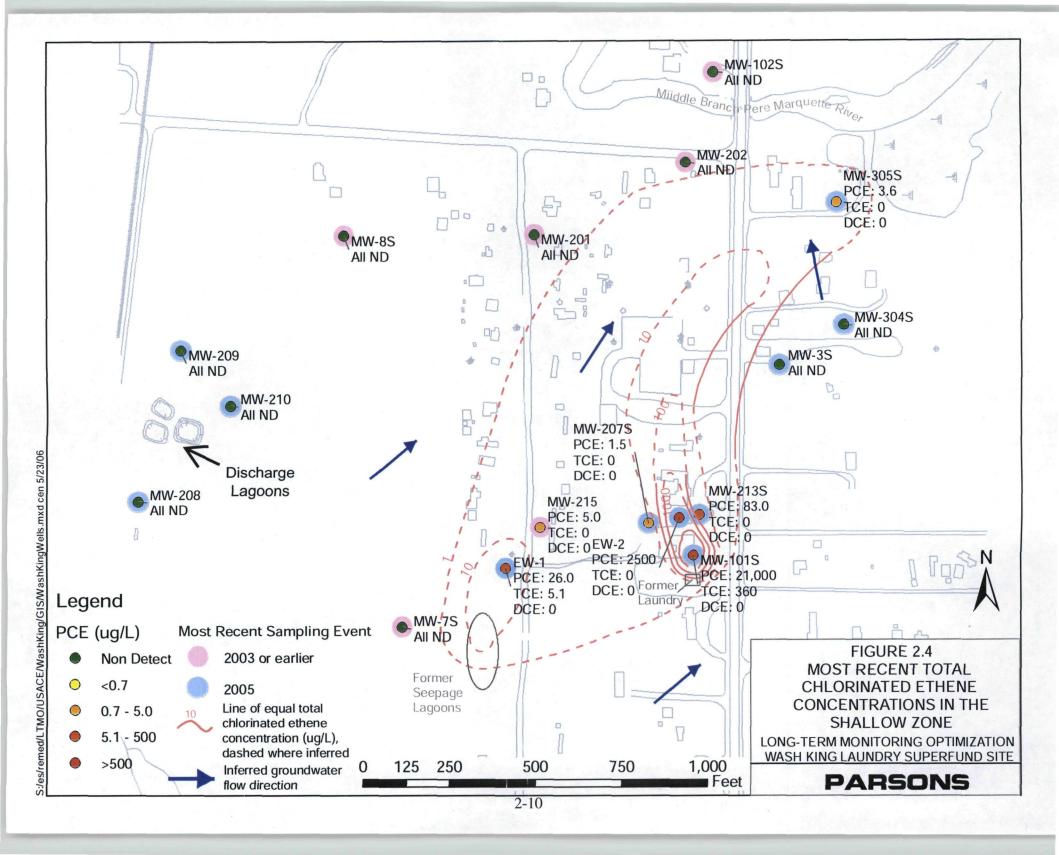
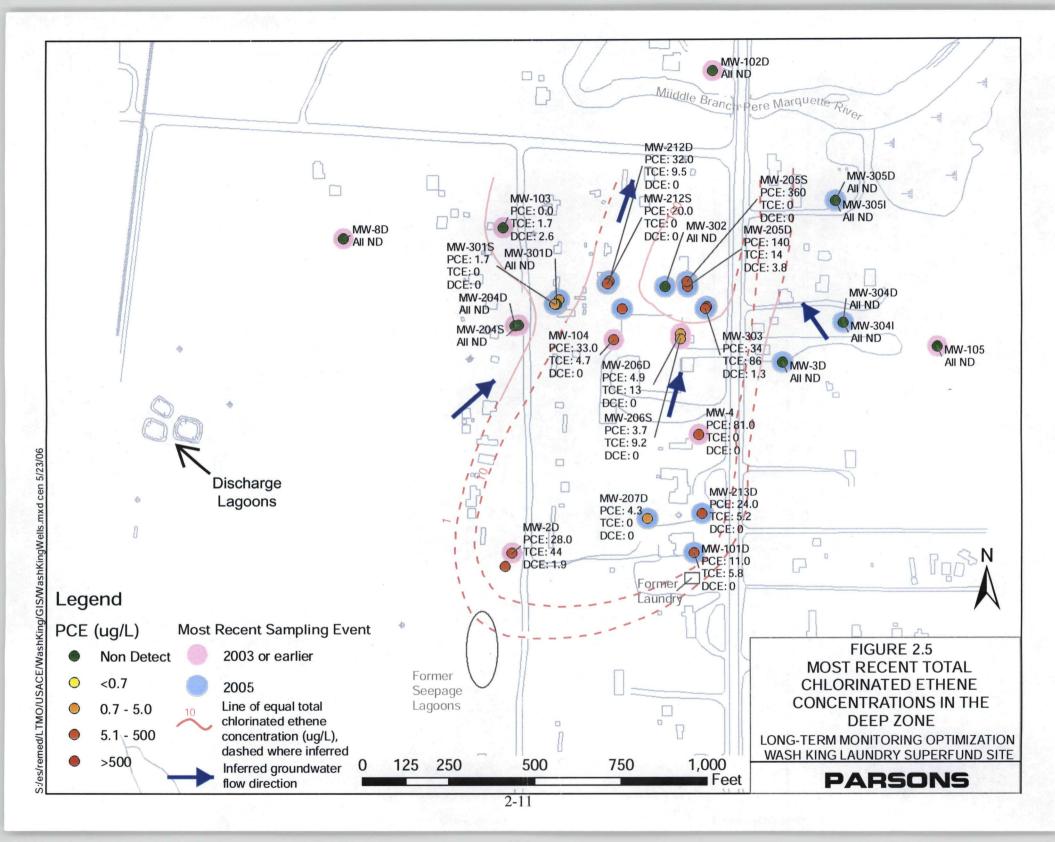


Figure 5

Ethene Concentrations in the Deeper Zone



**Attachments** 

#### Attachment 1

#### List of Documents Reviewed

- 1. Remedial Investigation, 1991
- 2. Record of Decision, 1993
- 3. Explanation of Significant Difference, 1996
- 4. Technical Memorandum Pre-Design Field Investigations, 1995
- 5. Technical Memorandum SVE Pilot Test, 1996
- 6. Construction and Cost Estimate for Remedial Action, 1998
- 7. Operation and Maintenance Reports (January through December), 2002
- 8. Remedial Action Report, 2003
- 9. Quarterly Reports of Groundwater and SVE System Sampling and Remedial Systems O&M Sampling
- 10. Long-Term Monitoring Network Optimization Evaluation, 2006

Attachment 2

Community Notification Ad

The Michigan Department of Environmental Quality and the U. S. Environmental Protection Agency are pleased to announce that the first Five-Year Review is being completed for the Wash King Laundry Superfund site. The purpose of the Five-Year Review is to evaluate the implementation and performance of soil and groundwater clean-up remedies, in order to determine if they are or will be protective of human health and the environment. The Five-Year Review Report will be completed by September 30, 2006. A copy of the Report will be placed at the Information Repository located at the Pathfinder Community Library in Baldwin, 812 Michigan Avenue. For additional information, you may contact either Keith Krawczyk or Russell Hart, the site project managers at the following addresses or telephone numbers:

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